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ORIGINAL COMMUNICATIONS.

Lectures on Scarlet Fever. By Caspar Morris, M. D., late Lecturer on Practical Medicine in the Philadelphia Medical Institute.

Lecture VI.

Though it is undoubtedly true, that but few diseases are amenable to the influence of purely specific remedies, it is not the less certain, that general principles of treatment must be regulated in their application to each disease, by close observation of the peculiar character and tendencies which mark its own history. No habit can be more pernicious to the student, and less beneficial to the patient, than that so often adopted by superficial thinkers and indolent practitioners, of omitting the consideration of the causes which produce, and circumstances which influence, the progress of any form of disease; and filling the memory with modes of treatment and specific remedies which may be employed empirically, without endeavoring to understand the principles which should determine their adoption, and regulate their appli-

cation. There is no disease which more fully illustrates this common truth than that now under consideration. It is only from a careful study of its general history, as well as minute observation of the course of symptoms in individual cases, that any suitable idea of treatment can be deduced; and the liability to frequent change in the type of the disease, from simple and sthenic, to irregular and malignant, demanding a corresponding change in the mode of treatment, renders the success of the practitioner equally dependent upon the soundness of his general principles and the accuracy of his particular observation.

Preserving ever certain distinctive peculiarities which prove its identity, yet yielding continually to the influence of those extraneous impressions which govern its development at particular periods, the treatment to be pursued in Scarlet Fever must in like manner be regulated by one leading principle, while it is varied, not only by temporary or local demands, but often in accordance with individual peculiarities. You will find this view of the case has been too little regarded by those writers on the subject whose works are generally consulted by medical students. During some epidemics assuming a sthenic character, in others marked by a strong typhoid tendency; in some, complicated with severe local lesions, while in others, it pursues its course with but little tendency to any particular organ or structure; in some cases, pursuing a course as regular as the progression of the hours; while in others, it only touches at certain points on the confines of the disease, and assumes every conceivable variety of irregularity, it must be at once evident to you that no single remedy or simple plan of treatment could be set forth as appropriate to Scarlet Fever.

There is, however, one idea which should be ever present to your minds, as the regulating principle by which every plan of treatment must be conducted, and which shall place decided limits to the extent to which any course may be followed. Whatever peculiarities may mark the epidemic character, or vary the individual case, scarlet fever in all its varieties, is a disease which has a specific origin, a fixed course, and a certain termination.

There are some diseases in which every hour of continued pain, or disordered function, is a reproach to the skill of the physician;

since they are subject to properly applied remedies, and may, by them, be at once subdued. This, on the contrary, is one, the duration of which is fixed and may not be curtailed; and often its tendencies to local destruction may be only moderated, not wholly averted. This fact should never be lost sight of in this and the other kindred diseases which will claim our attention in succession; since he who should attempt to cut short the duration of scarlet fever, would find that it could be done only at the expense of the life of the subject. Even in guarding against local injuries, the same fact should be borne in mind; as, in a large majority of cases, these have a natural tendency to abatement with the decline of the primary symptoms. It was in all probability the observation of these facts which led Sydenham to express his celebrated caution against over anxiety and too vigorous effort; and by the same knowledge we are supplied with power to meet the empty claim of superior success in treatment, put forth with so much vainglorious boasting by modern empirics. While some cases have a fatal tendency so strong that no skill may avert it, by far the larger proportion of simple and anginose cases need little more than the avoidance of impertinent interference, and the guarding against injurious impressions from without, and they will cure themselves. Let me not be supposed to advocate an indolent indifference, or to assume that no treatment is necessary. There is no disease which demands more watchful care, none is more influenced by skilful scientific practice. I would only remind you that medical science has other remedies than drugs; and caution you against the unscientific resort to empirical perturbative treatment which is certainly more to be dreaded than the morbid impressions of the disease itself. These general principles are applicable to all the various forms assumed by this disease, and must be ever kept present in your mind during the consideration of the various plans of treatment and specific remedies which will be passed in review.

In order to render it more easy for you to embrace the views it is intended to present to you, the same division of the disease will be adopted as was resorted to when describing it. Commencing with the mildest form as affording the type of its character and treatment, we shall be better able afterwards to proceed to the consideration of the graver cases.

In the *simple* form of scarlet fever, where there is merely some vascular excitement, disturbance of the digestive functions, the eruption of the skin and redness of the mucous membrane, without swelling of the throat, nothing more is needed than a mild laxative, followed by a gentle refrigerant and diaphoretic treatment, with the avoidance of fatigue and exposure and the adoption of a careful diet, not only during the four days of febrile action, but until the desquamation is complete. A dose of good calcined magnesia, adapted to the age and other peculiarities of the patient, should be given on the first day of the disease. Lemonade, if the taste of the patient desire it, may be used freely as a drink, and it may be prepared either with simple boiling water, or with barley or rice water; and in either case may be rendered more grateful by the addition of ice. In the case of infants and young children, ice water or gum water is more acceptable than either. As a diaphoretic, the common neutral mixture, prepared with the natural lemon-juice and carbonate of potash, and not with the citric acid of the chemist, is very useful. The addition to this mixture of a small quantity of the spirit of nitrous ether is of service, as it not only increases the tendency to moisture of the surface, but also promotes the secretion of urine, which you remember is liable to be diminished towards the close of the disease. This secretion has also been found to be more acid in this disease than in health, and the use of an alkali was therefore suggested. To meet this indication, the carb. of soda has been much employed, and I can assure you that very many cases have passed through my hands to my entire satisfaction, in which no remedy was employed beyond the weak solution of this salt with the addition of sweet spirits of nitre. I am in the habit of directing the solution of a teaspoonful of the soda in a tumblerful of water, to which one teaspoonful of sweet spirits of nitre is added, and give from one teaspoonful to a dessert-spoonful every hour or two, according to the age of the patient. In these milder cases, the appetite is often but little impaired, and it is therefore important to guard against impropriety in indulgence. I am much in the habit of directing for children the cake known in this city as "lady finger" or Naples' biscuit, which contains nothing but wheat flour with a little sugar and egg; or a thin

slice of stale bread toasted quickly; or the biscuit known as "dried rusk," with milk diluted with boiling water sweetened, for the morning and evening meal. Where the fever is very slight, milk-toast without butter may be permitted. It is better that the midday meal should be of the same character if it can be accomplished; and no animal matter, either solid or in the shape of broth or soup, should, on any account, be allowed during the first four days. Where grapes and oranges are accessible, they may be freely used; care being taken that the skins and pulp are not swallowed; and you will find the indulgence of the child in these harmless articles will much abate the desire for other food.

Where the case is more severe and the nervous system more deeply implicated, and we have to contend with muscular twitching, or trembling, or delirium, you will derive the greatest possible benefit from cutaneous ablutions, to be employed conjointly with the treatment first indicated. No slight diversity of opinion with respect to this practice has been expressed by medical writers and practitioners. Under the erroneous impression that some morbid matter was present in the fluids which was to be eliminated by the skin, some have objected to the application of water to the surface, on the ground of its tendency to resist this action; whilst others have feared to resort to it lest it should diminish the cutaneous activity, and produce a transfer of the disease to the nervous centres. Both these views are founded on false notions of the pathology of the disease, and experience has fully proved the apprehensions they suggest are without foundation. Equally great has been the difference of opinion as to the mode of application of water. You must in this, as in all other cases, adapt your application to the object you have in view, and the circumstances of the individual case. In the large majority of instances, the object to be attained is merely the abstraction of heat from the surface, and the consequent diminution of nervous excitement. This may be obtained with the greatest comfort to the patient and least inconvenience to the attendants, by simple sponging with water. It will allay the heat, sooth the tormenting itching of the surface, and reduce the fequency of the pulse. The temperature of the fluid should be adapted to the sensations of the patient. There are

great constitutional peculiarities as regards the influence of temperature on the surface. While some persons in health enjoy a high temperature, and find all their functions performed with most comfort during the warm season, others are then languid and oppressed, and long for the return of the cold weather. In the use of baths, a like diversity is found. The languor and depression which in one person will follow the resort to cold bathing, will in another result in equal degree from the employment of the warm bath. Now these same constitutional peculiarities are carried into the hours of sickness. Tepid sponging may always be employed with benefit where the skin is hot and dry, the pulse quick and strong, and the patient restless. Affusion of water at a temperature not less than 96° or 98° of Fahrenheit, will in most similar cases be very beneficial, and this especially in those patients where there is great restlessness and delirium. It allays nervous irritability, and is often followed by refreshing sleep. Currie, of Liverpool, has advocated the use of *cold* affusions in this disease in very strong terms, and he has been followed in this recommendation by other writers. The preponderance of testimony is, however, against it, and it appears to me to be founded on imperfect views of the operation of cold. We are all familiar with the fact, that its primary impression is sedative. This cannot, however, be long maintained without producing serious depression of the vital force. When it is interrupted before this exhaustion is brought about, the result is increased action of the general circulation, and also of the capillaries of the part to which it has been applied. Both these conditions are injurious in scarlet fever: and at the best the cases reported by Dr. Currie prove only that no mischief resulted, since the most he claims is the final abatement of the fever on the fourth day. The remarks of Dr. Chapman on this subject are characterized by that sound discretion, for which he is so remarkable. Especially adapted, in his opinion, to those cases in which the nervous system is most deeply involved, he asserts that he has derived from the application of cold water to the surface, more positive benefit, than from any other remedial measure he has employed. There is one set of cases to which it is peculiarly appropriate; I allude to those in which there is violent delirium, with great heat of skin, very rapid pulse, and extreme restlessness, and not unfrequently con-

vulsions, or at the least violent muscular twitching. Bleeding, whether local or general, is in such cases almost always followed by fatal results. But a cold douche to the head, maintaining the impression by cloths wrung out of iced water, while the whole surface is freely sponged with that fluid at the temperature of the chamber, or but little below it, will do more to procure tranquillity and reduce the nervous excitement, than any other plan that can be adopted. Much important testimony to the value of this treatment, variously modified, might be adduced. By Dr. J. Forsyth Meigs the employment of affusion of water at 96°, containing a small quantity of vinegar, is mentioned with approbation. I have long resorted to baths from 96 to 100°, to which whiskey has been added as a means of tranquillizing young children, and inducing sleep. You will bear in mind that the temperature of the surface in this disease is much exalted above the natural standard of health. When then you resort to the application of water which feels warm to the hand of the person who uses it, it is yet so far below the temperature of the patient that it abstracts heat from the surface, and hence it is that apparently tepid sponging is followed by nearly the same results as those ascribed to more positive cold, and the shock being less it is not so liable to be followed by pernicious reaction. It diminishes the capillary excitement, and maintains a more healthy condition of the cutaneous functions; the interruption to which exerts so baneful an influence on the subsequent course of the disease. The influence of these results on the disease appear sufficiently great to account for the benefit conferred, without adopting the suggestion of Dr. Chapman, that "while mitigating undue excitement by its sedative agency, it also proves more directly the corrective of the effects of the specific virus causing the disease;" to which I draw your attention only for the purpose of exhibiting how high is the estimate he places on this mode of treatment. Dr. Condie is equally decided in the expression of his confidence in it; and Dr. Bell, in his work on baths, asserts "there is no other remedy which unites to any thing like the same extent, efficacy with safety, and immediate pleasurable results, as the cold bath."

If you bear in mind the importance of the functions of the skin, and the great influence the interruption of them must have

upon the condition of the circulating fluids, and the nervous centres, you will not think undue prominence is given to this remedial agency. More recently, similar views have led to the adoption of a practice, which, though highly lauded by some of my professional friends who have employed it, when first presented to the mind has no very strong claims to regard. I allude to the employment of inunctions, originally suggested by a German author in the offensive shape of rubbing with the skin of fat bacon. It is rendered less disgusting when modified, as by a recent English writer, who commends it as equally applicable to all febrile diseases, and resorts to an ointment composed of equal parts of suet and lard, which is to be rubbed into the dry skin by vigorous friction. Whatever benefit may accrue from this practice, it can be ascribed only to the soothing influence of the unctuous application to the skin, which acts here as in erysipelas, in which it certainly allays the local irritation, and thus by the removal of one important cause of excitement, may tend to the subduing of the febrile action. How far it may be applicable to the latter stages of the disease, and to those cases in which the sedative influence of cold would be pernicious, I am not prepared to express an opinion; though analogy affords many examples, which might, perhaps, induce some to think favorably of the practice as modified by Mr. Taylor, and to give it a trial, not only in scarlet fever, but in other febrile diseases, with a dry, husky condition of the skin. Nothing can be conceived less likely to promote the restoration of a patient than the German practice as reported in Ranking's Abstract. Not only is the material used for anointing the skin offensive in itself, but directions are given that the clothing should not be changed, "as a clean shirt takes up more of the fatty matter than one already saturated. The rubbing in is to be kept up twice a day for *three weeks*, and once a day *during the fourth*. The patient is, *after this*, to be washed daily with soap and cool water, and then only is the warm hip bath to be commenced." It would require the utmost confidence of success, to reconcile an American mother to such treatment, or induce an American physician to make his daily visits to a chamber so foul. Whatever benefit might accrue from the softening of the cuticle, would be more than balanced by the loathsome effluvia. Nor does the length of time during which the

application is to be made, convey an impression at all favorable to the remedial influence of this mode of treatment.

You will thus observe, that in the treatment of the simple form of scarlet fever, I am inclined to adopt a very simple treatment, even in those cases in which some symptoms of a very formidable character present themselves. Emetics recommended by some, may be harmless if employed in the very onset of the disease, when the spontaneous vomiting by which it is often ushered in, would appear to afford a natural indication for their use. If the stomach is known to be loaded with some improper food, or if the effort at vomiting is unsuccessful, a small dose of ipecacuanha may be given to aid in the expulsion of the contents of the stomach. I have never found it necessary to resort to them except in those cases which are ushered in by convulsions as the primary symptom, and which in their onset cannot be known to be scarlet fever, unless some direct communication with the disease, or its presence in the family, should give occasion for suspicion. In either case, the object to be accomplished by the emetic is very simple.

You may remember that when treating of the cause of the disease, I referred to the fact that it is often developed by some agency independent of the specific influence which gives to it its essential character. Whatever disturbs the healthy balance of the system, may thus prove the origin of a case; and among children nothing more frequently acts thus, than impropriety in diet, whether in quantity or quality. Digestion is suspended for the time, either from having been taxed beyond its normal power, or from the depressing influence of the scarlet fever miasm. In either case the presence of the ingestæ in the stomach becomes a source of irritation, which greatly aggravates the danger of the patient. The more promptly this offending matter can be discharged the better; and a dose of ipecacuanha, proportioned to the age of the patient, should be given the moment the power of deglutition is restored. Such cases generally occur in childhood or infancy. The body should be immersed in warm water, while a cold cloth is applied to the head, or cold water poured upon it from a slight elevation. This will almost always suspend the spasmodic action sufficiently long to permit the swallowing of the ipecac. which acts as a simple evacuant.

Purging, beyond the mere evacuation of the bowels as suggested, by magnesia, is positively injurious, and the use of calomel in this disease is, I think so deleterious, that if I were in doubt as regards a case, whether it were scarlet fever or no, I should think the doubt sufficient cause for withholding the use of that remedy, so great is the depressing influence it exerts in its primary impression. There is, in fact, no indication to be met by the use of purgatives; certainly none demanding the resort to mercurials. Neither the symptoms present, nor the results of examination of the bodies of the dead, afford any reason to suspect the presence of those disorders of the viscera, either functional or organic, to the relief of which this remedy is so well adapted. The depressing influence of calomel, and the irritation of the mucous membrane by the other cathartic remedies are both injurious. Bleeding is better endured in the simple form of the disease than in any other. But when the case is not violent it is unnecessary, and if it assumes a deeper grade of severity, my personal experience is very decidedly unfavorable to its employment. I have never seen any good result from it, even in those cases in which the nervous symptoms were most severe, and the vascular excitement the most intense, and I have, alas too frequently! had occasion to mourn over its fatal influence. The impression of cold will, in these cases, be always sufficiently sedative to allay the nervous excitement; and neither analogy nor direct examination of the results on the bodies of those who die, affords any reason to suspect the existence of cerebral inflammation in them. In almost every instance in which I have resorted to depletion, either local or general, in cases of scarlet fever in the primary stages of the disease, no matter how vigorous the patient, or violent the symptoms, the case has had a fatal termination; and in no cases has its evil influence been more manifest than in those in which convulsions or violent delirium, accompanied by sudden shrieks and grinding of the teeth, as in meningitis, would appear to have presented the strongest possible reason for a resort to it. You will find I place an entirely different estimate on the value of depletion in the treatment of the sequelæ of this disease.

Permit me to describe to you one case which occurred in what might be properly termed the transition stage of my views of the

treatment of this disease. It will illustrate, at the same time, the character of a severe attack of *simple* scarlet fever. The subject was a healthy boy, five years old. He had retired to bed in his usual health. About daylight I was called to see him with convulsions. I found him wholly insensible, with violent spasmodic action of the whole body and all the extremities, pupils contracted, pulse frequent, and skin hot. Though it was impossible to arouse his attention, yet the least disturbance, as in moving him, or administering an enema, produced increased convulsions followed by long continued muscular tremor. On enquiring into the history of the attack, I was informed he had been waked up by sick stomach, and the convulsions had occurred whilst he was in the act of vomiting. Portions of an apple eaten on the previous day were ejected just as he had swallowed it, imperfectly masticated. Supposing the case to be one entirely dependent on indigestion, so frequent among young children, I adopted the treatment appropriate to its relief. A stimulating injection was promptly administered, and the child removed to a warm bath; and so soon as it could be procured, a dose of calomel and ipecacuanha was given during an interval between the convulsions, while mustard cataplasms were applied to the extremities and epigastrium for the purpose of revulsion. At the end of two hours he vomited again, throwing off an additional quantity of undigested apple; soon after which he recovered his consciousness, so far only as to protrude his tongue when solicited to do so. He neither spoke nor manifested consciousness in any other manner. He continued through the day to start much, and manifested no knowledge of the action of the bowels produced by a dose of magnesia given soon after the operation of the emetic. As the convulsions did not return, and the pupils recovered their natural condition, I determined to rely on the counter-irritation of a blister, which was applied to the nape of the neck, and cool cloths kept constantly on the forehead, and to wait for the full effect of the purgative. The pulse continued very rapid throughout the day. The following morning I found him with a vivid eruption on the face and neck, conjunctiva injected, eyes upturned, and pupils contracted, pulse very rapid. The tendons of the wrist twitched incessantly under the finger; he started frequently as though about to spring off the bed, and grated his teeth with much violence.

It was impossible to arouse him; and his pulse was still as frequent as on the previous day. There could be no hesitation in recognizing scarlet fever, even if the tongue had not assumed the peculiar appearance which is so common in that disease. There was, however, no evidence of angina, except some little shrinking on passing the finger beneath the angle of the jaw. The cerebral symptoms were certainly urgent, and appeared to demand the most energetic treatment. In any other disease than scarlet fever, I should not have hesitated to resort to free depletion. Sad experience in several cases, which had then recently passed through my hands to a fatal termination, in which the convulsions and delirium had been even more violent, had led me to determine never again to employ depletion in such cases. I explained to the father my views of the case, told him the result of my observation, assured him of my readiness to meet any other physician of experience and good judgment in consultation on the case, or even, if he desired it, to yield the treatment to another; that if I employed any depletion, it must be to the smallest possible extent. Twelve leeches were applied to the temples, by which but about one ounce and a half of blood was abstracted—and the case was then committed to a mere expectant treatment. The rash was fully developed. There was no affection of the throat, beyond that which was indicated by the tenderness on pressure. The coma gradually subsided from hour to hour, till, on the fifth day, the symptoms all disapeared, and convalescence was fairly established. The favorable result of this case afforded me much encouragement. While in every instance in which active depletion had been employed by me for the relief of the cerebral symptoms, death had ensued; here was a propitious result, though the amount of blood drawn was too small to be entitled to any part of the credit of the case. I was thus confirmed in the opinion, that the cerebral symptoms were purely nervous, and had no connection with inflammation, or even vascular congestion. That the proper indication was only to allay nervous irritation, and to avoid every agent which should prostrate the vital energies. I accordingly from that time adopted a treatment having this object in view, in all similar cases, and have no hesitation in expressing myself entirely satisfied with the result.

I should now not employ even the calomel which was added to

the ipecacuanha in this case, under the impression that it was wholly dependant on gastric disturbance,—but should rely on the simple evacuants, to get rid of the ingestæ; following them by the tepid bath or affusion, and the use of simple drinks, with entire rest. You will observe that the *whole train* of morbid phenomena disappeared as the case approached the period at which scarlet fever terminates. I saw it first before daylight on the morning of Tuesday, and on Saturday convalescence was fairly established. To sum up the treatment of simple scarlet fever, I should adopt and recommend that of Dr. Armstrong: "Open the bowels (*not purge*) every day with some mild aperient," (if spontaneously opened, there is no need of medicine). "Keep the patient at rest, between cool clean sheets, on a bed or on a mattress with light clothing, and in a temperature from 56° to 60° F. Sponge the surface with tepid water twice or three times a day, while it is hotter than natural. Admit plenty of fresh air, allow a bland diet, and in two or three days the patient will be well." Above all, do not allow the dread of the name scarlet fever to induce you to adopt a treatment which shall be more injurious than the disease.

(To be continued.)

Case of Malformation in a Child. By M. Emanuel, M. D. Marcus Hook, Pennsylvania.

I was called to attend Mrs. H. in labor with her fifth child, and in about an hour she was delivered. In dividing the cord, I observed some malformation about the umbilicus, and as there was considerable flooding, I handed the child over to the nurse, and said nothing until after the expulsion of the placenta, to the upper end of which was attached a sac, containing a pint of coagulated blood. As soon as the mother was relieved, I examined the child, which had the following singular malformation: at each side of the umbilical opening, two small glands projected half an inch externally, resembling the testes, and very vascular. There was no penis, but a well formed scrotum, without testes, and no orifice at the anus. The right leg, from the knee joint to the ankle, was half the length of the other, and in place of a foot, there was a continuation of cartilaginous substance about four inches in length, resembling a finger,

with an extensor and flexor attached to the end, moveable at will. I made an incision in the perineum, and introduced a female catheter without any difficulty, three inches up the rectum, but no discharge came away. Before leaving, I left directions with the nurse to notice if the child had any evacuations, and where they escaped. In all other respects it was a fine healthy looking child. I thought I would not say any thing to the mother at the time; but as I was leaving the room, she inquired if the child was marked with the figure of horse, as she said that a little before she found herself in the family way, she had a fright; that one of her children had fallen between the horse and cart, and she fancied the horse had kicked him and forced his entrails out. This impression was strongly on her mind during the whole period of her pregnancy, although the boy was very little hurt. On visiting her the next day, the nurse said the child took some food, was very lively, and that it had passed both urine and feces, but that it all escaped at the navel. On making further examination, I noticed something of the shape and size of a French bean between the two small glands before mentioned, with an orifice in the centre of the flat surface from which the urine escaped. On the second and third day the child took the breast, the evacuations continuing as before, although the passage into the rectum was perfectly free. On the night of the third day the child was taken sick, and died on the fourth day after its birth. I visited her every day, though several miles from my residence, with the intention of obtaining the child after its death, for the purpose of making a preparation. Unfortunately, on that day I was so much engaged that I could not get there, and they buried it immediately, I know not where, to prevent my having it. You are aware how difficult it is for country practitioners to get a post mortem examination, or obtain parts for preparation.

Marcus Hook, Del. Co. June, 1851.

Representation in the American Medical Association. By T. H. YARDLEY, M. D., Philadelphia.

To the Editors of the Medical Examiner:

GENTLEMEN—I will be obliged if you will correct an error in your last number, in relation to the resolution offered by me at the late meeting of the "American Medical Association," in Charleston.

The following are the preamble and resolution as offered, and adopted by the Philadelphia County Medical Society, viz:

"Whereas, The Constitution of the American Medical Association, by providing for the reception of delegates from 'permanently organized Medical Societies, Medical Colleges, Hospitals, Lunatic Asylums, and other permanently organized Medical Institutions,' unjustly favours the profession in cities, where such institutions exist and are readily formed, and diminishes the importance and thereby discourages the establishment of County Medical Societies in rural districts;

Resolved, That the Constitution of said Association should be so amended as to admit only delegates from County or State Medical Societies."

While on the subject, I will, with your permission, correct an error which exists in regard to the object of those who introduced this resolution; we do not desire, as has been asserted, to exclude *Professors* from the Association; we wish, in the language of Dr. Drake, "to *popularize*" the Association with the profession in the United States, by transacting the business on purely republican principles.

As the Constitution stands, the ratio of representation is more than three times as great from Medical Schools, Hospitals, &c., as it is from the mass of the profession in County Medical Societies: this is productive of jealousy, and we hear the epithets of laymen and professors as at Cincinnati; or a jealousy exists between rival schools, and we have the professors of one school protesting against the admission of delegates from another Medical School, as was the case during the last meeting in Charleston.

Physicians are the best judges of the moral worth and profes-

sional respectability of their fellow practitioners; but by the present Constitution, the members of a County Medical Society may unanimously exclude a number of physicians from membership with them, and the rejected applicants may immediately organize themselves into a medical association, or obtain a charter for a medical school, and send one-third of their number as delegates to the American Medical Association.

Members of County Medical Societies now will not vote for Professors as delegates, because they consider they may be sent by their respective schools; and Professors neglect or refuse to join County Medical Societies, because they conceive they are excluded from its honors. But if the proposed alteration in the constitution is effected, professors who love their profession and feel an interest in the Association will join County Medical Societies, and, in return, the societies will be proud to send them as delegates, for they generally are, and always should be, the most intelligent and respectable of the profession.

Let the physicians of every county in the United States form themselves into a society, and have their constitution approved by the Censors of the State Society; let the constitutions of all State Societies be approved by Censors appointed by the American Medical Association; let every member of a county society be considered a member of the State Society and of the American Medical Association, and receive certificates of membership, and contribute to their funds. Then will we have realized the exalted ideas of Professor Meigs: we will have from ten thousand to forty thousand members, without any privileged classes among us, but each one will be entitled to his vote in the choice of delegates, and each one will contribute his share to the common fund; giving us an income of from ten thousand to two hundred thousand dollars, sufficient to reward labor and encourage enterprise, and thus give us incalculable influence and power.

A certificate of membership from the great "American Medical Association," will then be of more value to a young man than all the diplomas of all the medical schools in the country, for the inquiry will not be, is he a graduate? but, is he a member of the *American Medical Association?* Do the respectable physicians who are his immediate neighbors, and who are best qualified to judge, regard him as an intelligent, educated, honorable man,

with whom they are willing to have professional and social intercourse? or do they regard him as an ignorant, uneducated man, or one who would resort to any means, however dishonorable, for the purpose of obtaining practice and popularity?

There are other arguments in support of the resolution, but it has been referred to a committee, the intelligent chairman of which, I have no doubt, will place the subject in its true light. I have only attempted to correct an error and to "define our position;" but as it is an important alteration in the constitution to be acted on at our next meeting, I think it is proper that the profession should discuss the matter, and that medical societies particularly should express their opinion.

Very respectfully, &c.,

June 15*th*, 1851. THOS. H. YARDLEY.

[The following history was handed to us by a friend as a medical curiosity. It was published upwards of fifty years ago in the Gazette of the United States and Philadelphia Daily Advertiser; as it may be *new* to some of our readers, we are induced to give it place.—EDS.]

Account of a man who lives upon large quantities of raw flesh. In a letter from Dr. Johnston, Commissioner of Sick and Wounded Seamen, to Dr. Blane.

Somerset Place, Oct. 18, 1798.

MY DEAR SIR,—Having in August and September last been engaged in a tour of public duty, for the purpose of selecting from among the prisoners of war such men as, from their infirmities, were fit objects for being released without equivalent, I heard, upon my arrival at Liverpool, an account of one of those prisoners being endowed with an appetite and digestion so far beyond anything that had ever occurred to me, either in my observation, reading, or by report, that I was desirous of ascertaining the particulars of it by ocular proof or undeniable testimony. Dr. Cochrane, Fellow of the College of Physicians of Edinburgh, and our medical agent at Liverpool, is fortunately a gentleman upon whose fidelity and accuracy I could perfectly depend, and I requested him to institute an inquiry upon this subject during my stay at that place. I enclose you an attested copy of the

result of this—and as it may probably appear to you, as it does to me, a document containing facts extremely interesting, both in a natural and medical view, I will beg you to procure its insertion in some respectable periodical work.

Some farther points of inquiry respecting this extraordinary person having occurred to me since my arrival in town, I sent them in the form of queries to Dr. Cochrane, who has obligingly returned satisfactory answers. These I send along with the above mentioned attested statements, to which I beg you to subjoin such reflections as may occur to you on this subject.

I am, my dear Sir, your most obedient humble servant,

J. JOHNSTON,

To Gilbert Blane, M. D., F. R. S.,
and one of the Commissioners of Sick and Wounded Seamen.

Charles Demery, a native of Benche, on the frontiers of Poland, aged 21, was brought to the prison of Liverpool, in February, 1799, having been a soldier in the French service on board the Hoche, captured by the squadron under the command of Sir John B. Warren, off Ireland.

He is one of nine brothers, who, with their father, have been remarkable for the voraciousness of their appetites. They were all placed early in the army—and the peculiar craving for food with this young man, began at thirteen years of age.

He was allowed two rations in the army, and by his earnings or the indulgence of his comrades, procured an additional supply.

When in the camp, if bread or meat was scarce, he made up the deficiency by eating four or five pounds of grass daily—and in one year, devoured 174 cats (not their skins) dead or alive—and says he had several severe conflicts in the act of destroying them, by feeling the effects of their torments on his face and hands—sometimes he killed them before eating, but when very hungry he did not wait to perform this humane office.

Dogs and rats equally suffered from his merciless jaws—and if much pinched by famine, the entrails of animals indiscriminately become his prey. The above facts are attested by Picard, a respectable man, who was his comrade in the same regiment on board the Hoche, and is now present—and who assures me, he has often seen him feed on those animals.

When the ship on board of which he was, had surrendered after an obstinate action, finding himself, as usual, hungry, and nothing else in his way but a man's leg, which was shot off, lying before him, he attacked it greedily, and was feeding heartily, when a sailor snatched it from him, and threw it overboard.

Since he came to this prison, he has eat one dead cat and about twenty rats. But what he delights most in, is raw meat, beef or mutton, of which though plentifully supplied by eating the rations of ten men daily,* he complains he has not the same quantity, nor indulged in eating so much as he used to do, when in France.

He often devours a bullock's liver, raw, three pounds of candles and a few pounds of raw beef in one day, without tasting bread or vegetables, washing it down with water, if his allowance of beer is expended.

His subsistence at present, independent of his own rations, arises from the generosity of the prisoners, who give him a share of their allowance. Nor is his stomach confined to meat, for when in the hospital, where some of the patients refused to take their medicines, Demery had no objection to perform this for them—and his stomach never rejected anything, as he never vomits, whatever be the contents, or however large.

Wishing fairly to try how much he actually could eat in one day; on the 7th of September, 1799, at 4 o'clock in the morning, he breakfasted on four pounds of raw cow's udder—at half past 9, in presence of Dr. Johnston, commissioner of sick and wounded seaman, Admiral Child and his son, Mr. Foster agent for prisoners, and several respectable gentlemen, he exhibited his powers as follows: There was set before him five pounds of raw beef, and twelve tallow candles of a pound weight, and one bottle of porter—these he finished by half past 10 o'clock. At 1 o'clock there was again put before him, five pounds of beef, and one pound of candles, with three bottles of porter, at which time he was locked up in the room, and sentries placed at the windows to prevent his throwing away any of his provisions. At 2 o'clock, when I

* The French prisoners of war are at this time, maintained at the expense of their own nation, and are each allowed the following daily ration—twenty-six ounces of bread, half a pound of beef, half a pound of greens, two ounces of butter, or six ounces of cheese.

again saw him with two friends, he had nearly finished the whole of the candles, and great part of the beef, but had neither evacuation by vomiting, stool, or urine; his skin was cool and pulse regular, and in good spirits. At a quarter past 6, when he was to be returned to his prison, he had devoured the whole, and declared he could have eat more, but from the prisoners without telling him we wished to make some experiments on him he began to be alarmed. It is also to be observed, that the day was hot, and not having his usual exercise in the yard, it may be presumed he would otherwise have had a better appetite. On recapitulating the whole consumption of this day, it stands thus:—raw cow's udder, 4 lbs.; raw beef, 10; candles, 2. Total, 16 lbs. besides 5 bottles of porter.

The eagerness with which he attacks his beef when his stomach is not gorged, resembles the voracity of a hungry wolf, tearing off and swallowing them with canine greediness. When his throat is dry from continued exercise, he lubricates it by stripping the grease off the candle between his teeth, which he generally finishes at three mouthsful, and wrapping the wick like a ball (string and all) sends it after at a swallow. He can, when no choice is left, make shift to dine on immense quantities of raw potatoes or turnips; but from choice would never desire to taste bread or vegetables. He is in every respect healthy, his tongue clean, and his eyes lively.

After he went to the prison, he danced, smoked his pipe, and drank a bottle of porter—and, by four next morning, he awoke with his usual ravenous appetite—which he quieted by a few pounds of raw beef.

He is six feet three inches high, pale complexion, grey eyes, long brown hair, well made but thin, his countenance rather pleasant, and is good tempered.

DESTAUBAN, French Surgeon.
LE FOURNIER, Steward of the Hospital.
REVET, Commissaire de la Prison.
LE FLEM, Soldat de la ser Demi Brigade.
THOMAS COCHRANE, M. D., Inspector and Surgeon of the Prison, and Agent, &c., for sick and wounded Seamen.

Liverpool, Sept. 9th, 1799.

A true copy, JOHN BYNON,
Clerk in the office for sick and wounded Seamen.

Queries and Answers.

1. What are the circumstances of his sleep and perspiration?

He gets to bed about 8 o'clock at night, immediately after which he begins to sweat, and that so profusely as to be obliged to throw off his shirt. He feels extremely hot, and in an hour or two after he goes to sleep, which lasts until one in the morning, after which he always feels himself hungry, even though he had laid down with a full stomach. He then eats bread or beef, or whatever provision he may have reserved through the day; and if he has none, he beguiles the time in smoking tobacco. About 2 o'clock he goes to sleep again, and awakes at 5 or 6 o'clock in the morning in a violent perspiration, with great heat. This quits him on getting up; and when he has laid in a fresh cargo of raw meat (to use his own expression) he feels his body in a good state. He sweats while he is eating; and it is probable owing to this constant propensity to exhalation from the surface of the body, that his skin is commonly found to be cool.

2. What is his heat by the thermometer?

I have often tried it, and found it to be of the standard temperature of the human body. His pulse is now 84, full and regular.

3. Can this ravenous appetite be traced higher than his father?

He knows nothing of his ancestors beyond his father. When he left the country, eleven years ago, his father was alive, aged about 50, a tall, stout man, always healthy; and he can remember he was a great eater, but was too young to recollect the quantity, but that he eat his meat half boiled. He does not recollect that either himself, or his brothers, had any ailment, excepting the small pox, which ended favorably with them all. He was then an infant. His face is perfectly smooth.

4. Is his muscular strength greater or less than that of other men of his time of life?

Though his muscles are pretty firm, I do not think they are so full or plump as those of most other men. He has, however, by his own declaration, carried a load of 300 weight of flour in France, and marched 14 leagues in a day.

5. Is he dull or intelligent?

He can neither read nor write, but is very intelligent and conversable, and can give a distinct and consistent answer to any question put to him. I have put a variety at different times and in different shapes, tending to throw all the light possible on his history, and never found that he varied, so that I am inclined to believe that he adheres to the truth.

6. Under what circumstance did his voracious disposition first come on?

It came on at the age of thirteen, as has been already stated. He was then in the service of Prussia at the siege of Thionville; they were at that time much straightened for provisions, and as he found this did not suit him, he deserted into the town. He was conducted to the French General, who presented him with a large melon, which he devoured, rind and all, and then an immense quantity and variety of other species of food, to the great entertainment of that officer and his suite. From that time he has preferred raw to dressed meat; and when he eats a moderate quantity of what has been roasted or boiled, he throws it up immediately. What is stated above, therefore, respecting his never vomiting, is not to be understood literally, but imports merely that those things which are most nauseous to others, had no effect upon his stomach.

There is nothing farther to remark, but that since the attested narrative was drawn up, he has repeatedly indulged himself in the cruel repasts there described, devouring the whole animal, except the skin, bones, and bowels; but this has been put a stop to, on account of the scandal it justly excited.

In considering this case, it seems to afford some matters for reflection, which are not only objects of considerable novelty and curiosity, but interesting and important, by throwing light on the process by which the food is digested and disposed of.

Monstrosity and disease, whether in the structure of parts or in the functions of appetite, illustrate particular points of the animal economy, by exhibiting them in certain relations in which they are met with in the common course of nature. The power of the stomach in so quickly dissolving, assimilating and disposing of the aliment in ordinary cases, must strike every reflecting person with wonder, but the history of this case affords a more

palpable proof, and more clear conception of these processes, just as objects of sight become sensible and striking, when viewed by a magnifying glass, or when exhibited on a larger scale.

The facts here set forth, tend also to place in a strong light, the great importance of the discharge by the skin, and to prove that it is by this outlet, more than by the bowels, that the recrementitious parts of the aliment are evacuated; that there is an admirable co-operation established between the skin and the stomach, by means of that consent of parts so observable; and so necessary, in the other functions of the animal economy; and that the purpose of aliment is not merely to administer to the growth and repair of the body, but by its bulk and peculiar stimulus to maintain the play of the organs essential to life.

BIBLIOGRAPHICAL NOTICES.

Illustrations of Syphilitic Disease. By PHILIP RICORD, D. M. P., &c. &c. *Translated by* THOMAS F. BETTON, M. D., &c.; *with the addition of a History of Syphilis, and a complete Bibliography and Formulary of Remedies, collected and arranged by* PAUL B. GODDARD, M. D., &c. *With Fifty large Quarto Plates, comprising* 117 *beautifully colored Illustrations.* Philadelphia. A. Hart (late Carey & Hart) 126 Chestnut street, 1851. pp. 383, 4to.

"If there is one disease which, more than another, merits the distinction of the term *opprobrium medicorum*, that disease is syphilis." So said a leading British reviewer some thirteen years ago, when the researches and new lights of Ricord were just struggling into notice.

"For little less than three centuries and a half," continues the reviewer, "it has monopolized a share of medical literature nearly as large as all the remaining members of the nosological family put together. And what has been effected by all these labors?" The best answer to this question has long since been again and again afforded, by the various publications of the

champion of inoculation and speculum examinations, and by those of his disciples, as well as by the discussions and investigations to which they have given everywhere a powerful impulse. Above all, has it been signally and triumphantly replied to in the famous *Clinique Iconographique de l'Hôpital des Vénériens*, of which the "Illustrations" above announced are the admirable re-print and translation.

In this splendid production of the most celebrated syphilograph of the age, we have not only an ample vindication of our profession against the aspersion of "*opprobrium*," but a striking evidence, at once, of the disheartening nature of the malady itself, as the terror and scourge of evil doers, and of the certainty with which it may be followed and controlled, in many of the phases that formerly served only to puzzle the physician and horrify his patient.

M. Ricord's *Clinique Iconographique* may be regarded as the most complete epitome and practical exemplification of his views and course of investigation, upon all the great questions connected with the study of venereal disorders. Its pictures, whether of the pen or pencil, are drawn with characteristic force and aptness of purpose, from the actual and daily life of his hospital and private practice. It seems to have been his labor of love and the pledge of his professional supremacy, in the speciality to which he has been so long and so efficiently devoted. On all these accounts it would be hailed with acclamation, as the richest offering of its able author. But it is destined to become vastly more popular and influential in every way because it presents in its unequalled lithographic colored plates by far the most beautifully natural and instructive series of demonstrations of syphilitic disease that has yet appeared. As mere specimens of scientific art these representations will vie with the finest essays of Cazenave and Wilson, or of any of the dermatologists or morbid anatomists of the day. It is unnecessary, however, to dwell upon their excellence here; the reputation of the original work is too thoroughly and universally established, to require any further mention of its chief attractions. These have long been operating for themselves, abroad and at home; and we are very sure that the transatlantic prototype is already rapidly winning its way, through similar causes, to a still more widely spread and effectual

renown. Many of our readers must have been accustomed to its concise but clear and full descriptions, and life-like and frightfully distinct delineations, as the different numbers issued, seriatim, from the Parisian press; and they will coincide with us in our agreable surprise in finding so excellent an imitation in the American counterpart, presented by the Philadelphia collator and translator.

These gentlemen, and their publishers have earned the thanks of the profession in this country in other ways not less than by the elegant and faithful version of their author's language, and the arrangement and very superior execution of the plates and letter press. They have materially increased the interest of the book, to American readers, by adding to the lessons of M. Ricord, an elaborate and curious history of syphilis, an extensive bibliography, and an extremely useful formulary of remedies. These additions, together with the occasional notes of Dr. Goddard, certainly have enhanced the value of the American edition, so much as to have conferred a double obligation on the American admirers of Ricord; even were the translation and the style of the illustrations less eminently praiseworthy than they unquestionably are.

No one will deny the usefulness of an undertaking which thus brings within the reach of the most contracted means, the best work of its kind in any language. Nor can we doubt the importance of the example thus strikingly afforded to less enterprising editors and publishers. We do not believe that a single venture of this sort has failed to secure an encouraging return for the most liberal outlay of trouble and expense, when these have been properly directed. Indeed, we are so convinced of the eventual success of all these first class publications, apart from their intrinsic value, that we are always glad to have an opportunity to aid them in their progress, and we unaffectedly regret, that in this particular instance, our really earnest wishes in behalf of Drs. Betton and Goddard's admirable offering, have been so unusually long in finding suitable expression.

We cannot undertake a critical analysis, or very detailed notice, but we hope to give some idea of its general scope, and of a few of its prominent and peculiar features. The plates, we are told, "amount to fifty in number, but several are accompanied

by two or more cases and illustrations, making the whole number of illustrated cases ninety-two." The originals were drawn and colored from life, under M. Ricord's particular direction, by Messrs. Emile Beau and F. Bion, Parisian artists of the highest standing. And they have been accurately and beautifully copied in this city, under direction of Dr. Goddard, at the establishment of P. S. Duval, and colored after the French by Mr. T. S. Jones.

Some changes have been made in the arrangement of the author, and a few of his plates and cases have been omitted in the American edition. These modifications may be immaterial and even advantageous to American readers, although we are not enlightened on the subject in the preface of the editors. They are none the less unfair to M. Ricord, however, since they necessarily impair the integrity of the production for which alone he holds himself responsible. The fault is venial enough in this case it is true, and it is handsomely atoned for in many ways; still it does appear to us a draw-back, and perhaps the more to be deplored because it stands alone.

In the present melancholy dearth of native literature, we may well be satisfied to make the most of transatlantic skill and learning in any form, within the limits of propriety. The interests of humanity are certainly advanced by such a course, and the circumstances of the country would seem to justify a reasonable use of all the means of improvement that are placed at our disposal, whether they be willingly accorded us or not by the master minds to whom we owe them. But in thus appropriating the intellectual treasures of richer lands than ours, let us at least so wear the borrowed plumes that they shall do no dishonor to their owners. If we must still feed upon the crumbs of European science, do let us have them as they fall,—fresh and free from the smoke and dust of the commentator's kitchen.

To return to our "Illustrations." The first seventy-four pages are occupied with the valuable additions of Drs. Betton and Goddard, which we have already mentioned as bona fide acquisitions, and entitled to high praise; especially as they are printed separately, and are distinctly acknowledged, so as not to interfere with the body of the work.

The introductory portions having been dispatched, we are

ushered in medias res, with a long succession of clinical reports and illustrative plates, which offer a most instructive series of lessons upon every thing connected with the different varieties, appearances, stages, localities, complications, treatment,—in a word, the whole history, theoretical and practical, of the subject. He treats, for instance, of primary ulcers, of primary follicular ulcers, primary indurated ulcers, diphtheritic, gangrenous, phagedænic, serpiginous, pultaceous, elevated indurated, annular indurated, indurated granulating ulcers, artificial inoculations, and accidental do.; of primary ulcers, in short, of every shape and kind. Then we have the various complications and accompaning constitutional disorders; such as virulent adenitis or bubo, acute adenitis, indolent ditto, phimosis, eczema of the glans, balanoposthitis, lymphitis, ulcerative adenitis, blenorrhagic urethritis, raspberry-like vegetations with phimosis and perforation of the prepuce, wart-like vegetations, perforating chancre of the frenum, paraphimosis, primary non-indurated ulcer of the upper gum, indurated chancre of the breast, &c. in a nurse, chancres of the anus, &c., &c. We have also an abundant display of syphilides, and of all other secondary symptoms, transition symptoms and tertiary symptoms. This brief and cursory list of topics will afford some idea of the range of clinical demonstration undertaken and successfully prosecuted by this energetic teacher. A glance at the list of contents, as well as the most hasty examination of the numerous figures on the plates, will convince any one of the thorough and comprehensive, and at the same time, strictly practical manner in which he has succeeded in dealing with his revolting theme. A more careful study of the letter press, will bring to the reader's attention another important feature of the book. This is, that M. Ricord in the course of his exposition of the great variety of cases, with the treatment appropriate to each, has managed to illustrate, and at some length to explain, the doctrines and special modes of practice which distinguish the now well established school of which he is the acknowledged head and founder; and which, in some respects at least, are now generally admitted to have had a decided influence upon the prophylactic, as well as therapeutic management of this horrible disease. Plates 2nd and 5th, for example, exhibit three different cases of previously unsuspected chancres on

the cervix uteri, and enable him to dwell upon the practical importance of examination by the speculum as the only reliable means of diagnosis in affections of the female sexual organs.

"Analagous cases," says he, "are more common than is supposed, and they are the more dangerous, insomuch that women, so long as the affection remains local and concealed, may thus transmit, in good faith, diseases which men contract, believing that the women with whom they have had connection were not diseased. This, again, is one source of error into which those have fallen who believe in the spontaneous origin of syphilis." Again, in relation to the third case, he remarks, "The suppuration to which they [non-indurated chancres of the neck of the uterus] give rise is abundant, sometimes sanious, may simulate a vaginal discharge, and give rise to a suspicion of blenorrhagia, and subsequently to the transmission of chancres to the male by a woman who had only a discharge." "How many errors of this kind," exclaims our author, "occured before I had made the use of the speculum so familiar in the study of venereal diseases! How many errors are still committed by those who prefer basing their diagnosis on the *story* of the patients, rather than seeking truth with more exactness." The great value of the speculum has long since been fully recognized and acted on; and we are told by the American editor, in a note upon the subject, that it has occurred to him to verify many times the conclusions drawn from these two preceding cases. Examinations by the speculum in doubtful cases have repeatedly resulted in the discovery of chancres very much to the astonishment of the patients who had submitted to the test with a full consciousness of their integrity, notwithstanding the disease which they had been suspected of communicating to their male companions.

In plates 1st, 2d, 3d, 4th, 5th, 6th, (the last two being incorrectly marked) 7th, (not marked at all), and 11th, (likewise not marked), we have, along with other matters of interest, distinct representations of various forms and stages of artificial and accidental inoculation, which forcibly remind us of M. Ricord's greatest triumph in the study of syphilitic diseases.

Plate 9th is occupied with the appearances of the affected parts in two remarkable cases of urethral chancres accompanied with blenorrhagic discharges, which had been fatal to the patients,

and had thus afforded an opportunity for a conclusive demonstration of what he had long insisted on, the positive existence of the *chancres larvés*, or hidden primary sores within the region of ordinary gonorrhœa. These two important cases were made the subject of a special memoir to the Academy of Medicine, which was reported on adversely in a long counter-argument by M. Lagneau and M. Cullerier. This counter-report is quoted by the author, in conjunction with the history of the cases, and with a summary rejoinder and a synopsis of his syphilo-graphic creed. Here then we have within the compass of a few pages the pith and substance of the inoculation question and its dependent corollaries. Let us hear M. Ricord's conclusions, as briefly stated at the close of his reply to M. Lagneau. A few words in advance, however, from M. L.'s report would not be out of place. He admits that M. Ricord, having had his attention strongly directed to the occasional occurrence of specific ulcers in the male urethra, accompanied with a blenorrhagic flow and sometimes apparently masked by a genuine gonorrhœa, was induced to repeat his researches on the genital organs of women, and ascertained by repeated application of the speculum that chancres frequently existed deep in the vagina, and even on the os uteri itself. This fact being once established—and it would no longer seem doubtful—continues the reporter, "it follows naturally that similar ulcerations should be found in the urethra of men laboring under blenorrhagia more frequently than has been supposed." After a further exposé of M. Ricord's course of reasoning, he goes on to say, "Therefore that deep-seated chancres of the male urethra, or chancres hidden and masked under the guise of blenorrhagia alone, according to M. Ricord, constitute the virulent blenorrhagia of authors, was in his opinion, proved by the result of inoculation, by the most exact analogy and the closest logic. Pathological anatomy was still waiting to complete the triumph. His last crowning argument he has to-day brought foward for the second time." Then follows a short sketch of the cases for which we refer our readers to the book itself.

"Our colleague adds," continues the report, "If to these convincing proofs, it be added that the bubo which accompanies a blenorrhagia, the pus or muco-pus of which gives no results by inoculation, furnishes

none in its turn when it suppurates; whilst the bubo, by absorption of the chancres, furnishes like the other an inoculable pus, we shall see a notable difference. If on the other hand, that of the secondary symptoms of lues, chancre is the most common and constant precursor, and that blenorrhagic symptoms are rarely followed by constitutional disease, we will find an easy explanation and reason for maintaining opinions apparently discrepant, and yet in fact similar. The truth might be thus expressed: the primary symptoms of lues is chancre, the form and character of which cannot be the same in all the tissues, and which concealed in the mucous membrane, may either simulate a blenorrhagia, or be masked by it. Without a urethral chancre in blenorrhagia, secondary symptoms are impossible. The rarity of chancre in the urethra during a blenorrhagia, because the necessary predisposing causes are rarely found, explains the relative rarity of the true virulent blenorrhagia of authors, or what I call *chancre larvé*, compared with the numerous cases of mild blenorrhagia, and agrees with the observations of all good authors." "These," continues M. Ricord, as quoted by the report, "are propositions of great importance, which have arisen from close observation, and capable undoubtedly of great qualification, but which I have reduced in volume in order not to waste the time of the Academy."

The objections arrayed against his propositions are summed up by M. Ricord thus:

"Urethral chancres are rare. M. Lagneau has seen *mild* and *catarrhal* blenorrhagia followed by all the symptoms of constitutional syphilis. M. Lagneau says that coryza, conjunctivitis, and discharges from the rectum may be syphilitic without the existence of ulcerations, and may be followed by symptoms of constitutional lues, or propagate syphilis. He adds, that when I assert that the pus of chancre may produce non-virulent blenorrhagic discharges like other irritants, it is impossible for me to prove the assertion. To conclude; the last objections are urged against the uncertainty and dangers of inoculation."

These objections are well disposed of in a few words, by M. Ricord, who concludes his answer with his well known propositions, which unless more successfully controverted than they have yet appeared to be in the midst of protracted opposition, certainly "will add some positive results to a branch of knowledge which has hitherto been enveloped in the most absurd and ridiculous mystery." (vide p. 153.)

They are stated as follows:

"I. The syphilitic ulceration, at the specific period, produces an irritant pus, which, by inoculation, gives rise to a characteristic pustule followed by an ulcer identical with the former, and so on.

"II. Whatever may be the apparent qualities of the pus furnished by

an inflamed surface, without regard to the stage or degree of inflammation, if there is no *specific* ulcer, the inoculationis nugatory and unproductive.

"III. No ulcer of not well-proved syphilitic origin, or no artificial ulcer simulating syphilis, can furnish inoculable pus.

"IV. There is not a single symptom of primary syphilitic ulcer which may not be found in ulcers without a trace of syphilis, or which may not be artificially produced; the most perfect assemblage of symptoms, belonging to the true Hunterian chancre, furnishing merely a rational diagnosis. The only absolute, unequivocal and pathognomonic sign, which natu r or art cannot imitate, is the character of the secretion demonstrated by the results of inoculation.

"No one more than myself, has shown the inconveniences and dangers of inoculation, when I proved, contrary to many authors, that the pus of chancre, not only necessarily reproduces chancres, but likewise an ulcer identical with the former. If the inoculation is performed on the same person, the varieties of chancre depend on individual condition, and not on a variety in the specific cause, which is always the same.

"I have also proved the danger of inoculation with pus, reputed non-malignant, such as that of buboes, as was first asserted by M. Cullerier, who has since entirely yielded to my opinion.

"Whilst exhibiting all the cases to the numerous pupils attending my clinic, and publishing, consequently, all my researches, I have never concealed the dangers which might arise from the indiscriminate use of inoculation, but I have shown the advantages that practice and science might reasonably hope to derive therefrom.

"Inoculation performed with proper precaution, is now one of the most innocent operations, because we can promptly arrest its effects after having obtained the information desired. Cauterization with Vienna paste, on the fifth day, at which period, all the characters of the pustule and ulcer are sufficiently developed, always succeeds; and frequently the eschar, which results, leaves in falling off, the subjacent tissues already healed; or if it falls off at an earlier state, there remains only a simple wound which cicatrizes rapidly."

We have given this summary in full because of its importance, although the doctrine it contains has long been a familiar thing; and because that doctrine has continued to gain ground and strength from year to year, and has become as little a matter of conjecture and crude experiment, as it is one of novelty.

Want of time and space will oblige us to pass rapidly over the remainder of the volume. We shall refer as briefly as we can to a few of the cases which may suggest some practical remarks.

To go back a little, we may select case 3d, p. 126, (see fig. 4th of plate 6th,) as presenting some points of particular interest, at the same time, that it is a pretty fair specimen of the clinical reporting of the book in general.

"*Pic*—23 *years of age, by trade a gilder, admitted October 8th,* 1839. From this patient's account, he has long been subject to herpes preputialis, frequently occurring, but generally disappearing without treatment, after a duration of seven or eight days. The disease under which he now labors has existed for three weeks, and was observed three days after sexual connection. The first symptom he perceived was an ulcer on the internal surface of the prepuce, and which now is in the stage of reparation. This was soon followed by other ulcerations, and follicular inoculation.

"At this date, the glans is red, slightly swollen, and presenting on its surface several eczematous vesicles. On the corona glandis and the mucous membrance of the prepuce are numerous follicular ulcers resembling, for the most part, apthæ. The earliest of the ulcers, also the most extensive, has reached the state of reparation, and appears evidently due to the junction of several groups of ulcers. Its roseate base, already projecting beyond the adjacent parts, thus constitute one of the varieties of ulcers designated by the term *ulcus elevatum.* The edges of some of the chancres in the progressive stage are perpendicular, and their gray base formed by an adherent coat. Others still in the incipient stage, having the vesiculo-pustular form, resemble so exactly the eczematous vesicles on the glans that an examination of their apparent characteristics scarcely marks the difference between them.

"In this patient a recollection of the order in which the symptoms appeared, prove to us that the virulent pus furnished by the first ulceration, has become the cause of two very distinct phenomena; on the one hand, by the infection of the follicles in the vicinity of the corona glandis, it has given rise to follicular chancres; and on the other, by its acridity as an irritating substance, it has favored the developement of the eczematous eruption on the glans.

"The thigh of the patient was inoculated with pus from one of the vesicles on the glans, as well as with pus taken from one of the eczematous vesicles developed on the surface of the balanitic mucous membrane.

"The chancres were cauterized with nitrate of silver and dressed with charpie soaked in aromatic wine. The eczema of the glans was treated by a solution of nitrate of silver, (1 part in 250 of distilled water.) Half diet.

12th. "The inoculation with the pus from the corona glandis has produced the pustule characteristic of the primary ulcer; it was torn open, and beneath the skin was found throughout clearly divided by an ulcer with perpendicular sides and grayish base. The inoculation with the pus from the vesicle of the eczema has produced no result, and the distinction between the symptoms, so difficult on mere inspection, has thus been rendered certain by the artificial inoculation. Three-fourths diet.

"29th. The use of the nitrate of silver and aromatic wine has much improved the aspect of the chancres on the corona glandis. The ulcer in the state of reparation of which the base was projecting, has become level with the surrounding parts; and the grayish coat, formed on the chancres in the progressive stage has nearly disappeared. Cleanliness

and the lotion of nitrate of silver will remove the eczematous vesicle from the balanitic mucous membrane. Continue the dressings and regimen.

"Nov. 6th. The ulcers are every where in the stage of reparation. They are superficially touched with nitrate of silver. The dressings and regimen are continued; and on the 15th, he was discharged well."

Plate 8th, exhibits a very graphic illustration of a bad case of primary ulcers, acute balano-posthitis, phimosis and gangrene. The practical, point an account of which we quote from its history, is the failure of inoculation, which, in the words of the writer, "proves to a certainty that the gangrene has radically modified the specific nature of the primary ulcers. It is also important to observe," continues he, "that the pus mixed with gangrenous detritus, the contact of which had produced an erythema of the parts adjacent, did not furnish on inoculation, the smallest symptom which it was possible to confound with those resulting from inoculation with the pus containing syphilitic virus, an agent indispensable in developing the regular phenomena always produced by its introduction under the epidermis, and which cannot be simulated by the more or less acrid secretions furnished by the genital organs, whatever may be the degree of inflammation of the ulcers seated on them."

Plate 10th, affords an additional illustration of gangrenous primary ulcer, and of the non-inoculating property of its purulent secretion. Extreme tension of the tissues in this case, and threatened extension of the gangrene, rendered it important to remove the phimosis by an operation, which, as M. Ricord remarks, should be resorted to "as rarely as possible during the existence of chancres in the progressive stage, for the virulent pus does not fail to inoculate the edges of the incision, and thus extend the ulceration." The operation was performed, however, as a matter of necessity, and in the hope that the specific character of the primary ulcers whose existence was suspected, had been modified by the gangrene, which had mixed its detritus with the secreted pus. It afterwards appeared that the lips of the incision did not ulcerate, "thus verifying the prognosis given as to the destruction of the virulent principle by gangrene. Nevertheless, in order to establish incontestably this point, some pus from the primary ulcer was inserted into the left thigh, and the right

thigh was inoculated with pus taken from the superior angle of the division of the prepuce." These inoculations produced no effect.

On plate 21st, we find a specimen of virulent primary ulcer of the gum, contracted by the application of the mouth to the genital organs of a woman affected with chancre.

This is the only case ever met with by M. Ricord, although he tells us that he has several times seen chancres of the lips and tongue. His "object in adducing this example, was to prove that the inoculable virulent syphilitic pus does not select any particular organ, and that it always acts locally, wherever the conditions necessary for its development are found." "Moreover, as a proof that the severity of syphilis does not depend, as has been said, on the location of the primary disease," we are informed, "that this patient had no constitutional symptoms, for he remained healthy long after the period [within six months, if no mercury has been taken or employed,] at which they should have occurred."

The plate (No. 24) and cases to which we next refer, introduce us to "one of the most diffiult problems of syphilitic pathology." The transmission of syphilis from the child to the nurse, and *vice versa*. The two cases are respectively that of a nurse and child, both affected with secondary symptoms, and the nurse also with primary—the child having had a syphilitic father; and that of a child of a healthy mother and healthy *husband*, but of whom the *real father* was secondarily diseased. They show the difficulty, easily imagined, of getting at the truth, so far as parents and nurses are concerned to conceal and misrepresent it.

In regard to contagion from secondary affections, M. Ricord says that he has frequently met with cases favorable to this belief. But whenever he has seen the infant and nurse in the commencement, which often occurs, he has been always able to distinguish the coincidence of secondary symptoms from true contagion produced by the contact of inoculable primary disease (or chancre.)

In relation to the important question of the transmission of syphilis from the parent to the child, he advances the following propositions, based upon a large number of cases.

"I. The father and mother may transmit the disease to their child indifferently, if either or both of them be affected.

II. Transmission may occur from the parents to the child, when they are affected with constitutional symptoms, or when a concealed syphilitic diathesis exists in them.

III. The absence or existence of constitutional symptoms in parents, at the moment of impregnation and conception, exerts no influence on the form of the disease which may afterward appear in the child. The distinction established by M. Cazenave between congenital and hereditary syphilis, and which is based on the absence or presence of constitutional symptoms in the parents at the moment of generation, or which have been developed in the mother during gestation, is totally erroneous; and, indeed, M. Cazenave confesses that his opportunities of observing it have not been ample.

IV. The character and period of the manifestation of the symptoms in the child are governed by the stages to which the disease had advanced in the parents at the moment of generation. The treatment to which the parents were subjected, may also retard, prevent, or modify the appearances in the child.

V. If the parents are both healthy at the time of generation, and the mother contracts syphilis during gestation, she may transmit the disease to her child. Of this I have seen several examples, at various periods of pregnancy, even to the seventh month inclusive.

VI. When the venereal poison is transmitted from the mother to the child during pregnancy, infection takes place through the medium of the placenta, and, in this case, appears to occur after the fourth month of utero-gestation.

In abortions which are consequent on syphilis, if the father alone be diseased at the moment of generation, the abortion may occur at any period of pregnancy. If the mother alone be diseased at the time of conception, the abortion will not take place until after the fourth month.

VII. Children born of a father or mother affected with syphilis may escape infection; for a certain disposition to receive constitutional disease is necessary for the child as well as the adults, and this may be absent.

VIII. Observations made as accurately as possible, seem to prove that constitutional syphilis may be trasmitted from the child to the mother during utero-gestation."

In connection with this subject, we may cite a case of bad tertiary affection of the throat, (see p. 278,) shown in fig. 3d, plate 30th. "Notwithstanding the doubts which may exist concerning paternity, in spite of the legal precept '*Pater est ille quem nuptiæ demonstrant*,' I think it important here," says our author, "to point out what, in this case, bears on the question of transmission on the part of the father, and which relates to what may be observed in a more rigorous manner, when discussing transmission by inheritance from the mother to the child. Experience teaches

us that in the stage of tertiary symptoms, parents may give birth to children presenting no trace of syphilis."

"At the time of his marriage in 1845, M. C—— had no syphilitic symptom, and in thirteen months his wife was delivered of a perfectly healthy child. This child still remains well;—nevertheless, M. C—— was under the influence of a syphilitic diathesis, for the first deep ulceration of the throat appeared fifteen months after his wife's first accouchement, and, a remarkable circumstance, eleven months before the last recurrence of the tertiary ulcers in his throat, he had a second child, like the first perfectly healthy. Madame C—— has always enjoyed good health."

With these quotations, we are reluctantly obliged to close. We would be glad to avail ourselves of many others of the cases, and the plates accompanying them, for the purpose of calling the attention of our readers to the various matters of doctrine and experience they may bear upon, but must content ourselves with with earnestly recommending the study of the whole work, as the very best assistant in the diagnosis and management of venereal diseases that has yet been published in this country. Of course it does not supersede the systematic and more elementary works, especially those of M. Ricord himself, and we may add of his able English advocate and coadjutor, Mr. Acton. It constitutes what it alone pretends to be, a splendid clinical illustration of the general facts as they are described in the more didactic essays; and as such it must prove in its American dress a most valuable practical companion and adviser to the advanced students and practitioners of this country. The only evidence of want of care in the preparation of the plates, is the almost continual negligence displayed in the numbering of many of the separate figures as well as of nearly all of the plates themselves. This oversight of the lithographer, however, does not appear to have led to any confusion in the binding, and is therefore not so much to be deplored. Still it is embarrassing to readers, and may become a source of trouble in the binding, and we trust that an early opportunity will be taken to remove the difficulty in the later copies, which will doubtless soon be wanted.

Lectures on the Eruptive Fevers. By GEORGE GREGORY, M. D., Fellow of the Royal College of Physicians of London; Physician to the Small Pox and Vaccination Hospital at Highgate. *First American Edition, with notes and an Appendix, by* H. D. BULKLEY, M. D., Physician of the New York Hospital. New York. S. S. & W. Wood, 1851.

This book comprises a course of lectures on the Eruptive Fevers, delivered by Dr. Gregory in 1843 at St. Thomas's Hospital, London, and annually repeated since that time. It is a very complete manual on the subject, distinguished by great learning and research, an extremely agreeable and lucid style, and, we think, very sound pathological and therapeutic views. The additions of Dr. Bulkley are extensive, and his running comments and appendix greatly enhance the value of the work.

Dr. Gregory makes four grand divisions of cutaneous affections. I. The acute febrile affections bringing life into hazard, which he terms the greater exanthemata, viz.:—Small Pox, Measles, Scarlet Fever, and Erysipelas. II. The acute febrile affections not bringing life into hazard—the lesser exanthemata, which he subdivides into two sections. 1. Vesicular affections, Vaccinia, Varicella, Herpes, and Miliaria; and 2. The simple efflorescences, not leading to fluid effusion, Lichen, Urticaria, Roseola, and Erythema. III. The chronic cutaneous affections of a mild or benignant character, Lepra, Psoriasis, Ichthyosis, Impetigo, Elephantiasis, and Moluscum. IV. Chronic cutaneous affections of a malignant character, such as Cancer, Lupus, and Fungus hæmatodes. The two last divisions, the chronic cutaneous diseases, are not treated of.

The subject of small pox occupies a principal share of the author's attention; and he devotes considerable space to the very interesting and important questions—the identity of small pox and cow pox, and the prophylactic value of vaccination. The conclusions presented in connexion with these points—particularly the latter—will arrest general attention. Dr. Gregory proclaims a distrust in the permanent efficacy of vaccination as a preventive of small pox, which we certainly were not prepared for; and his advocacy of a partial return to inoculation cannot

but be received as a remarkable and even startling suggestion.

The identity of small pox and cow pox, is a subject not merely of speculative interest, but of a near practical bearing upon the protective value of vaccination. Jenner was sensibly alive to this; and always strongly advocated the opinion that the two diseases were only modifications of each other. He even advanced the idea that cow pox was the original or parental form, which had been converted by time and modifying circumstances into the more malignant variety, small pox.

This theory is rejected in toto by Dr. Gregory, who maintains that the two affections, instead of being identical or analogous, are antagonistic; and that cow pox, far from being of a variolous, is in fact, of an anti-variolous nature—admitting always, however, that "it alters and modifies the human constitution so as to render some individuals wholly, others partially, and, for a time, unsusceptible of small pox." The discussion of this question is so closely mixed, as we have observed, with the subject of vaccination, that, in the absence of any positively determining facts, opinions are formed with reference to it, according to the views entertained of the efficacy of the agent. The advocates of the theory of entire *identity* frankly admit that a "conviction of the non-identity of the two diseases, would go far to shake, in toto, their belief in the real efficacy of vaccination."

The experiments of Mr. Ceely and others have certainly settled the question, that the inoculation of the matter of small-pox, into the teat or vaginal membrane of the cow, produces the secretion of a fluid identical with that of ordinary cow pox, which, when inserted into the human subject, is followed by a regular vaccine vesicle. This fact has strengthened the belief in the identity of the two affections. But it is met by Dr. Gregory with the argument, that other poisons than the variolous poison develop the vaccinia in the vessels of the cow—as matter from the heals of the horse, when laboring under a disease termed the *grease*. And he infers that "the variolous as well as the equine miasm is converted by the constitution of the cow into the vaccine miasm, in the same way as the vaccine fluid is secreted under several forms of feverish excitement." If the experiment of Ceely proves any thing, it is that small pox is the primary,

and cow pox the secondary disorder, and not, as Jenner thought, that cow pox is the parent of small pox. Moreover the non-identity of the two diseases is urged from the fact that they may co-exist in the human subject, progressing side by side to maturity, without the slightest disposition to coalesce or hybridize. And we confess that there appears to us to be very great weight in this objection.

Dr. Gregory's opinions as to the gradual exhaustion of the vaccine protection are strikingly in contrast with the absolute feeling of security, which prevailed on the subject, within the recollection of most of our readers. The protective power of cow pox he thinks *complete*, or nearly so, in childhood, say up to the age of eight years. But puberty and other disturbing causes, as change of climate or severe fevers, notably diminish the vaccine energy, leaving, however, a "portion of virtue still clinging about the system sufficient to preserve life, though not to exhaust susceptibility." The results of his statistical investigations on the subject, amount to this: that small pox, in the unvaccinated, is only five times more fatal, than in those who have previously undergone vaccination. And this announcement is followed by expressions of almost unqualified disbelief in the restorative efficacy of REVACCINATION. It is, indeed, recommended. But we are told, that in the larger number of instances, it will be followed by scarcely appreciable benefit, while it sometimes "occasions considerable local distress, and some amount of constitutional disturbance." That, with these opinions, our author turns to inoculation, as at least an occasional resource, is not surprising.

"The imperfect aid afforded by revaccination suggests the question whether, in adult inoculation (between the ages of twelve and twenty,) we might not find a better mode of testing and improving the security of the vaccinated. Small pox, taken casually after vaccination, proves fatal, as we have seen, at the rate of seven per cent. Inoculated small pox proved fatal, in former times, at the rate of only one fifth per cent., or one in five hundred. As regards the extension of small pox from the practice of inoculation, no real danger need be apprehended. The experience of ten years in England has amply demonstrated that the diffusion of small pox is wholly independent of such artificial propagation. Small pox has been as general in England since inoculation was abolished as it was previously. But it is as yet little known, that small pox may be received into and pass through the system without producing either fever or eruption. I inoculated three of my own children at the respective

ages of twelve, thirteen, and fourteen, after successful vaccination in infancy, and the result was as follows :—In two, local affection without fever or eruption. In the third case, local affection without fever, but with papular eruption on the seventh day, not advancing to vesicles. I firmly believe that these children are now, and will remain through life, unsusceptible of small pox. The advantages derived from such a course of procedure are these :—If the child's constitution be under the full vaccine influence, no effect will follow. If the vaccine influence be subsiding or altogether lost, then the small pox will be taken at the period of life (puberty) most favorable for safety, instead of being received (as too often happens under the present system) under circumstances the most unfavorable,—for instance, by mothers at the period of parturition, by young women on the eve of marriage, or by young men at a distance from their friends. The state of the law in England prohibits the practice here ; but I hope it will be tried in other countries, where the judgments of medical men are less fettered."

The American editor has met these views with a very able argument in favor of re-vaccination, which we extract at length.

"We feel that the propriety, if not the duty, of revaccination is now so generally acknowledged as to perhaps render it unnecessary for us to adduce evidence in favor of the practice. But as the views of some on the subject may not be so fully established, and as others may feel interested in an examination of the evidence by which it is supported, we have concluded to devote a short space to it.

Some of the earliest, and at the same time most conclusive testimony in its favor, is furnished by its results in the Wirtemberg, Hanoverian, Bavarian, and especially the Prussian armies. Our limits will not permit us even to give a summary of the figures on which the results are founded, and we can only transfer to our pages some of their most striking features and items.

Revaccination was first commenced systematically in the Prussian armies in the year 1833, after having been practised in the Wirtemberg army and among smaller bodies of men for several years previously, and recommended by several leading practitioners, and has been continued in that and in several other armies, and also among large bodies of civilians, from that time to the present. The following are among the results :

In Wirtemberg but one case of variola occurred in five years among 14,384 revaccinated soldiers, and three only among 26,864 revaccinated civilians.

Not a single case of small pox occurred among those who had been revaccinated in the Prussian army in 1836, 1837, or 1839. But three deaths by this disease occurred in all the military hospitals of Prussia in 1841, and of these, one was in a person not vaccinated on entering the army, because it had been done shortly before ; a second in a recruit who had not been revaccinated ; and the third is an officer

who had been revaccinated some years before, but without success. In 1834, two deaths are recorded of those who had been revaccinated with effect in the Prussian army, and one in 1843. In 1849, but one case was fatal, and this was in a recruit, vaccinated when a child, and who had not yet been revaccinated.

During an epidemic of small pox in Copenhagen in 1828 to 1330, and also a very severe one in 1832, and another in 1835, not a single instance of variolous or varioloid disease was observed among any who had been revaccinated.

In the Danish army, of those who were successfully revaccinated in 1838, not one was attacked with small pox.

In an epidemic of variola at Heidelburgh in 1843 and 1844, described by Dr. Hœffle, of all those attacked, not a single one had been previously revaccinated, while the vaccinations most successfully made did not protect from the most severe varioloid those older than ten years.

M. Lombard stated, during a late discussion at the Belgian Academy of Medicine, that in the dreadful epidemic of variola which has just desolated Liege, none of those who underwent revaccination took the disease. (*Brit. and For. Med. Chir. Rev. Jan.* 1851.)

Steinbrenner, as the result of extensive investigation of the subject, says, "revaccination is the indispensable complement of the first vaccination, not that it is always necessary, as some pretend who admit the loss of its protective power by time, but because it is necessary in very many cases, and because there is no other means of distinguishing such urgent cases from those in which revaccination is unnecessary." (*Traité sur la Vaccine*, p. 684.) He derives his arguments in favor of revaccination from its effects in the different European armies to which we have already alluded, as well as when performed by various individuals on a smaller scale, of which he presents a long array, and says that, in the absence of every other argument, these results are strongly in its favor, because it is impossible that the process should be so often successful unless the success depended upon a predisposition which exposed the individuals to variola. He also demonstrates the necessity of general revaccination by consideration derived from the too great frequency of vaccinations which are not all protective, or only imperfectly so.

M. Bousquet says, after giving a long list of instances of protection by revaccination without a failure, even in the midst of epidemics, a list of which, he says, he could easily extend, "there has not been an epidemic which has not proved, at the same time, the virtues both of vaccination and of revaccination." (*Nouveau Traité de la Vaccine*—Paris, 1848, p. 506.) He also says (p. 501), "the success of revaccination is at the same time the effect and the proof of the wants of the system"—when it succeeds, it not only proves that the protective power of vaccination is diminished, but it supplies a remedy for this diminution."

The following are the conclusions on this subject of the Committee on Vaccination, of the French Academy, as contained in their report to that body, in February, 1845:—

1. Small pox rarely attacks those who have been vaccinated before the age of ten or twelve, from which age, until thirty or thirty-five, they are particularly liable to small pox.

2. Revaccination is the only known method of distinguishing those vaccinated persons that remain protected, from those that do not.

3. The success of revaccination is not a certain proof that the person in whom it succeeds was liable to contract small pox; it merely establishes a tolerably strong presumption that he was more or less liable to take it.

4. In ordinary periods, revaccination should be practised after fourteen years, but sooner during an epidemic.

Among the conclusions of a report on the subject of vaccination, lately made by a Committee to the Belgian Academy of Medicine, are the following:—

"As the immunity conferred by vaccination is not indefinitely absolute, revaccination, at least for a greater number of individuals, is rationally indicated.

"Experience has proved that a recent revaccination preserves from variola, and varioloid, and that, practised on a sufficient scale, conjointly with vaccination, it constitutes a sure means of arresting the progress of this malady when it appears epidemically.

"It succeeds best in proportion as it is most required, that is the more remote the period since the individual has had variola, or has been vaccinated.

"During the prevalence of an epidemic of variola or varioloid, it is prudent to revaccinate all of those whose first vaccination dates ten years back, and all of those whose first vaccination gives rise to any doubt. (*Brit. and For. Med. Chir. Rev.*, Jan. 1851—from *Gaz. Méd.*)

Tommasini was led by his observations of its results during an epidemic of variola in Italy, to recommend it to his fellow-countrymen, and we might add the names of many highly distinguished of our profession and on both sides of the Atlantic, who concur fully in the importance of the practice, and some who even think it criminal to neglect it.

We cannot but feel, therefore, in view of these facts, that the testimony in favor of re-vaccination is too strong to admit of its neglect. If no other argument could be adduced, the fact that it immediately *arrests the course of epidemics* when they appear, and that its faithful performance has almost entirely banished small pox from some armies in which it had formerly committed great ravages, would seem conclusive in its favor.

It may perhaps be said the results in the European armies to which we have referred speak against the manner in which primary vaccination was performed in these cases, and can hardly, with justice, be advanced in proof of what would have occurred, had the process been

perfect in every respect. But allowing this to be true, they may still be adduced as a warning of the danger to which our own population is at least partially exposed; for it cannot but be true, that the process has been not unfrequently performed among us in such a way as to diminish, if not entirely destroy, its protective power. Hence, we need revaccination as a test of security, and as the only one within our reach. And when we consider the almost perfect protection, thus far at least, afforded by revaccination, and how trifling is the operation, we can surely hardly entertain for a moment the idea of resorting to variolous inoculation, either as a test, or for additional security against the failures of vaccination—an operation which is at least occasionally fatal, which subjects those upon whom it is performed to some of the serious results which follow in the train of variola itself, and which cannot be practised without multiplying centres of contagion, and thus aiding the ravages of the very enemy it is intended to combat.

It is proper, however, to state, that the value of this practice is doubted by some, and even its propriety questioned.

Occasional instances of an attack of varioloid after re-vaccination doubtless do occur; but they are so rare as to be thought worthy of record when a single one occurs. Bousquet gives the case of an infant. M. Newman also gives a case, after revaccination by himself. (*Prov. Med. and Surg. Jour.* May 1, 1850.) He considers the practice as a test of the efficacy of the first vaccination, and not a renewal of its influence, which, he contends, can never take place. The occurrence of a regular vaccine vesicle after revaccination he regards as a proof that the individual had not previously been successfully vaccinated.

It is true, as our author remarks, that a talented commission, appointed for the purpose in Paris, reported against the practice of revacccination; but it is equally true that another commission (the one whose conclusions we have quoted), appointed for the same purpose, at a later date, reported in its favor.

As to the age at which its practice should be advised, that of about ten or twelve years, is the one most generally recommended, advice founded on the time at which cases of varioloid have been found to commence occurring—the proportion of cases under ten years of age being very small.

Steinbrenner fixes upon the period of twelve to fifteen years of age as the one most proper for revaccination, and says that, if performed at that time, it will protect for life from variola.

Bousquet says that there is danger from variola from the age of ten or twelve to thirty or thirty-five years, and that the time for revaccination commences from the age of ten or twelve years, that its value increases at fifteen years, and is never greater than between twenty and thirty. In times of epidemic prevalence, it should be practised earlier.

In general terms, it may be said, that the prevalence of variola, the exposure of an individual at particular times, and anxiety felt on the subject at any time, may each afford a reason for performing an operation so trifling in its nature, and attended usually with so little inconvenience,

that it had better be submitted to more than once unnecessarily, than neglected, when it might have preserved from an attack of a loathsome disease, and perhaps even saved life itself.

We need hardly add, that even greater care should be taken with the second and subsequent vaccinations than with the first, as we have not the same test of its success as in that case. It should therefore be a rule of practice to repeat the revaccination, if not successful the first time, and even to repeat it several times, in such a case; as a failure to produce the disease might happen from some imperfection in the process, as sometimes occurs in the primary vaccination."

THE MEDICAL EXAMINER.

PHILADELPHIA, JULY. 1851.

In the account of the late proceedings of the American Medical Association, published in our June number, the attention of our readers was perhaps directed to some remarkable circumstances connected with the presentation of the report of the Committee on Obstetrics. After this report had been read by the chairman, Dr. STORER, of Boston, the accuracy of certain statistical facts, embodied in it, was called in question by Dr. ROBERTSON, of South Carolina. These facts had been extracted from a paper by Dr. H. A. RAMSEY, of Lincoln county, Georgia, published in the last October number of this journal. Dr. Robertson moved "that the statistics, alluded to in the report, be stricken out, as the author of them was not a reliable man." And it appears that this motion, in substance, prevailed, and that "Dr. Storer erased the statistics referred to."

We confess that these proceedings struck us as somewhat extraordinary. We have no personal knowledge of either of the gentlemen named, and we write in the dark as to the under-current of feeling which may have prevailed on the occasion. But, forming our judgment from the record, we cannot but dissent from the decision which was made. Whatever the merits of the case, the ordinary forms of justice were disregarded in the condemnation of an unheard, absent person; and there appears to us to have been in every way a want of

propriety in the time, the place, and the tribunal, which were selected for the trial of this question of credibility. The affair seems to have been very much a 'snap judgment.'

We have received from Dr. Ramsey a letter on the subject, in which he indignantly repels the assault upon his veracity. He has forwarded to us a number of testimonials as to his reliability and integrity, from his professional brethren and others of his neighborhood. And he also states, that he has invited Dr. Robertson to substantiate his charge before a board of professional referees, in whose decision he will entirely acquiesce.

We have felt it due to our correspondent to allow him to be heard in reply to this attack. Let us, however, add, that we take no part whatever in the personal controversy between the gentlemen in question, and that our remarks apply only to the manner in which it originated.

OBIUTARY.

Died,—At Philadelphia, June 24th, Dr. Spencer Sergeant, second son of the *Hon. John Sergeant.* Dr. Sergeant was lately one of the resident physicians at the Pennsylvania Hospital, where his quiet and faithful discharge of his duties, as well as his amiable and gentlemanly deportment, endeared him to all connected with that institution. Although young in years, he had given bright promise of eminence and usefulness. Many of our readers will remember the able reports that emanated from his pen during his official connection with the Hospital, a large proportion of which, with his judicious practical remarks upon them, were extensively copied both at home and abroad. To his many friends, as well as to the profession, his early death will cause a void not easily to be filled.

MEDICAL NEWS

Dr. Thos. Stewardson, formerly of this city, has received the appointment of Professor of Natural Sciences in the Georgia Military Institute, situated at Marietta. Dr. Stewardson's early devotion to these sciences, especially Botany, of which his knowledge is extensive, highly qualifies him for such a position. At one time when a resident in this, his native city , his zeal in behalf of Natural History induced him to perform the duties of secretary of the Academy of Natural Sciences, from which his public and private

engagements only forced him to return. As a citizen of another state, where health induced him to take up his abode some years since, his learning and acquirements have been appreciated, and we rejoice in the tribute to merit which is evinced by this appointment.

New-York Medical College.—Dr. J. M. Carnochan has been appointed professor of Surgery, in place of Dr. A. L. Cox, resigned; and Dr. Edmund R. Peaslee, of Dartmouth College, Professor of Physiology, Pathology, and Microscopy.

Buffalo Medical College. Some changes have recently taken place in the organization of this Institution. Prof. B. R. Palmer, of Woodstock, Vt., has been appointed to the chair of Anatomy, vacated by the resignation of Prof. Webster, announced in a former number of this Journal.

Prof. C. B. Coventry, having tendered his resignation, has been appointed "in consideration of his services in behalf of the College, and as a token of the high respect in which he is held by the Council and Medical Faculty," Emeritus Professor of Physiology and Medical Jurisprudence. Dr. John C. Dalton, jr., of Boston, Mass., has been appointed to the chair of Physiology and Medical Jurisprudence, vacated by the resignation of Prof. Coventry.

Mesmerism. It may be in the recollection of our readers that Sir Philip Crampton, some time since, in order test the powers alleged to be possessed by persons in what is called the clairvoyant state, produced by the mysterious influence of mesmerism, offered to enclose a bank note for £100, in a sealed envelope, which should become the property of any individual who could, while blindfolded and in the mesmeric sleep, tell its date and number. The challenge has been accepted by Mr. Hill H. Hardy.

Early Struggles of Leuret.—M. Leuret, late physician to the Bicêtre, at Paris, whose premature death was recorded in the April number of the Examiner, was a remarkable example of self-denial and perseverance in working his way to professional rank and fame. His father was a baker, and refused to furnish his son with the means of prosecuting his studies beyond the first year. Poor Leuret was compelled to enter the army as a common soldier. After four years' service, chance so far favored him that his regiment was quartered at St. Denis. His officers

were kind and exempted him from mounting guard. The whole of the French army at this period was clothed in white, and the pupils at Salpêtrière have never forgotten the puny little soldier in white uniform, but bespattered from head to foot, who walked every day for years, over the muddy causeway of St Denis, to attend the lectures of Esquirol. The privations which he then endured engendered the disease that cut him off at a later period. He used to sell his bread to buy a candle, wherewith to study during the night in the corner of the barrack, and continued this career with unshaken perseverance, until Esquirol, a man as good as he was great, came to his aid by obtaining his discharge, and appointing him to a place in Salpêtrière.

New Mode of Taking Fees.—The Editor of the *Union Medicale*, in an article on medical organization, mentions the following curious manner of taking fees:—A physician who lived in one of the most populous faubourgs of Paris, and who had an enormous practice, never took any fees at all; but twice a year his wife made a circuit among all her husband's patients with a large bag, which she presented to each, saying, "Put in as much as you like, or as much as you can." The physician in question left a considerable fortune as the result of this confiding practice. Another physician is mentioned, who fatigued two horses daily, and whose fee for every one was only one frank (tenpence) a visit. It is to such conduct as this, when two or three men undersell all their professional brethren, that M. Latour in part attributes the depressed condition of the Profession in France.

M. Cazeaux has been elected a member of the French Academy of Medicine, in the Section of Midwifery.

Death of Dr. Bougon.—Letters from Venice, mention the death of Dr. Bougon, the medical attendant of the family of the Duc de Bordeaux. It will be remembered, that at the time of the assassination of the Duc de Berri by Louval, Dr. Bougon was the first medical man who went to his assistance, and immediately sucked the wound, under the impression that the weapon was poisoned. Dr. Bougon, in 1830, followed the royal family of the elder branch of the Capets into exile, and remained with them till his decease. Such an example of truth and fidelity is indeed honorable to the Profession and to mankind. Would to Heaven the instances were more numerous.

Lord Langdale, who recently died in England, where he was long Master of the Rolls, was originally educated for the medical profession.

Medical Prescriptions.—Amongst the many notable schemes which the reform mania of the present day has propounded, is that of compelling physicians to indite their prescriptions in English. Petitions are in fact in the course of signature for this very purpose, if we may believe the newspapers. What the motive may be for this meddling with the usages of the profession we cannot conceive, unless it be the impression that a degree of safety is attainable in dispensing from a prescription in vernacular, which is not so from the Latin. Whatever it be, it will be a matter of little moment, as we do not believe that the legislature will interfere in a proceeding which has always worked well; but it is of importance as an evidence of the tendency on the part of the public to meddle with the medical profession, without the least reference to their welfare or convenience.—*Prov. Med. and Surg. Journ.*

Medical Department of the St. Louis University.—Dr. McPheeters has been transferred to the chair of Materia Medica and Therapeutics in this institution, made vacant by the resignation of Dr. Reyburn; Dr. Willis G. Edwards to the chair of Clinical Medicine and Pathological Anatomy; and Dr. Chas. W. Stevens elected to the chair of General and Descriptive Anatomy.

Obituary. Died recently, at Kensington, London, Henry Smith, Esq., surgeon, late of Torrington-square. Mr. Smith combined, with the highest practical attainments, an earnest love for physiological pursuits, and was a zealous co-operator with Dr. Marshall Hall in some of his earliest investigations.

Professor Kölliker. This distinguished histologist last autumn paid a scientific and recreative visit to Holland and Great Britain, in company with Dr. Czermak. From time to time, he expressed his opinions of what he saw, with regard to the subject which he particularly studies, in four letters, dated respectively from Utrecht, Leyden, Edinburgh and London, and addressed to Dr. Von Siebold, his colleague in the editorship of the *Zeitschrift für wissenschaftlichen Zoologie.*

In Utrecht, he appears to have derived great pleasure from his examination of the labors of Harting, Schroeder van der Kolk, and Donders; and he concludes his first letter by observing, that

"Utrecht is a soil where science flourishes so vigorously, that no attempt should be made to transplant it without careful consideration." The letter from Leyden contains an account of his visit to that place and to Amsterdam.

From Holland, Drs. Kölliker and Czermak passed over to Edinburgh, and visited the Highlands, though, as the author says, not with much profit to science, especially as they had lost the opportunity of exploring the sea off the west coast in company with Forbes and Goodsir. On their return to Edinburgh, they spent ten days with Professor Goodsir, and visited the museums and schools of anatomy in that city. Of Professors Syme, Christison, and Simpson, Dr. Kölliker says:—"In the hospital, we less admired the safety than the ease and elegance with which Syme operates The first is found in Germany; but the latter are more rare . . . Christison does all credit to the great name which he has in Germany; he is highly estimable as a man, and is, perhaps, next to Simpson, the most popular physician in Edinburgh. Simpson is incontestably the first obstetrician in Great Britain; he cannot have many equals, and perhaps no superior." The experiments of Dr. Simpson on parturition in swine, after removal of a portion of the spinal cord, are referred to by Dr. Kölliker, who says that, as far as they go, they show that parturition is independent of the action of the cord. In returning from a visit to the Bass Rock, the travellers were reminded, at the village of Whitechapel, twenty miles from Edinburgh, of the state of the study of anatomy in Britain, about twenty years ago, by the ponderous masses of iron trellis-work which were used to protect the graves in the churchyard from the resurrectionists.

After a visit to Glasgow, Drs. Kölliker and Czermak proceeded to London; and Dr. K. speaks in terms of great satisfaction of the reception which he met with from Mr. Quekett, of the Royal College of Surgeons. His collection of microscopic objects he believes to be in no way inferior to Harting's in Holland, but even to surpass it. W. Bowman, Sharpey, Todd, Wharton Jones, Carpenter, Owen, and Paget, receive each a justly deserved tribute. With regard to the Hunterian Museum, Dr. Kölliker thinks that it ought to be made much more available for instruction than it is at present. "So large an institution," he says, "should also be a large school"

for anatomical instruction. The Regent's Park, Zoological Gardens, the British Museum, and the Museum of Economic Geology, were each visited ; and the hippopotamus is honored with a brief notice.

Dr. Kölliker seems to have expressed his honest opinion of the state of anatomical knowledge in the places which he visited, and of the anatomists with whom he came in connection. British *savants* and practitioners may well feel gratified and encouraged by the tribute which he pays to their industry and knowledge.—*London Journ. of Med., May* 1851.

Illness of the Assistant Physicians at the Ward's Island Hospital.—We learn that five of the Assistants have recently suffered at this Institution with Typhus Fever—Drs. Ravenell, Emmett, Forbes, Blacknall, and Kerly. The first three have recovered, and are absent on sick leave. Dr. Blacknall has sufficiently convalesced to return to his duties, and the recovery of Dr. Kerly, (at present ill,) is confidently anticipated by his physicians.

Emigrant's Hospital, Ward's Island.—It is rumored that Drs. Hosack and Wilkes have resigned their places in the Medical Board of this Institution. We have not heard who are to be their successors.

Another Victim of Typhus Fever.—Dr. Ravenhill, another of the House Physicians at Bellevue, died at the Hospital a few days since, and was buried on Sunday last.

Concours—Election of M. Nelaton. M. Nelaton, one of the surgeons to St. Louis, was elected Professor of Surgery to the Faculty of Medicine on Wednesday last, and thus occupies the chair once filled with so much *éclât* by the illustrious Margolin. The election, it must be confessed, has occasioned universal surprise, for public opinion had selected another and more deserving candidate. The final decision was not arrived at without considerable hesitation,—one might almost say, without compromise of principle. It required no less than four different ballotings to arrive at a result. On the two first, the votes were thus distributed :—

For M. Michon, four votes, viz., Bouillaud, Larrey, and Hervez de Chegoin.

For M. Buisson, three, viz., Velpeau, Begin, and Reveillé Parise.
For M. Nelaton, three, viz., Rostan, Denonvilliers, and Langier.
For M. Robert, two, viz., Malgaigne, Gimella.*

On the third balloting, M. Robert's two voters went over to M. Nelaton; and, on the final *scrutin* between MM. Nelaton and Michon, the former was elected by a majority of seven to five votes.

The election, as I have said, has produced no small degree of surprise and regret, for the superiority of M. Buisson over all the other candidates was incontestable,—and it is seldom that the result of a Concours disappoints the judgment of the public. But, in the present case, it could hardly have been otherwise. M. Buisson was a stranger to the school of Paris, that is to say, pupil, representative, and professor of a rival institution; and his election would have been a virtual acknowldegement of the decadence of Parisian surgery. The schools of Paris and Montpelier have ever been opposed to each other, both in doctrine and educational practice, and *amour propre*,—a sentiment which influences even the most eminent men,—has, in the present instance, given rise to an act of manifest injustice. This opinion is entertained by the vast majority of those who assisted at the Concours, though many allege, in justification, that the judges could not have acted otherwise.

M. Nelaton, the new Professor, is a young man of very considable promise, and, although the Faculty may not have obtained the services of the best candidate, it will, at all events, be certain of possessing one fully competent to fulfil his duties. This is the main argument in favor of election by Concours. You are always sure of securing a man perfectly able to fill his office, though he may not be the *most* able,—a result which our British system often fails to produce.—*Paris correspondent of Med. Times, 24th May*, 1851

Kousso—Cod-Liver—Iodine. The recent importation of kousso into England appears to have a beneficial effect on our speculators here, who have reduced the price of the drug by one half. It is still extensively employed, notwithstanding its high price, and continues to sustain its reputation undiminished. Cod-liver oil, I regret to say, is not only excessively dear here, but of destestable quality. Any London house which would establish a depót in Paris, would confer on

* The number of judges in a Concours is fifteen; but three have been compelled to retire from ill health, viz. MM. Roux, Cloquet, and Gerdy.

us a great benefit, and for itself secure handsome profit. Rancid oil fetches five or six shillings a pint, and at that price it is impossible to bring it into general use. M. Quesnville, the celebrated pharmaceutical chemist, is making strenuous efforts to substitute his amygdalaceous solution of iodine for the "genuine pure," but medical men cannot be induced to abandon one of our most efficacious remedies for a compound the therapeutic effects of which are not yet established.—*Ibid.*

MISTAKE CORRECTED.—The following correspondence, between a delegate elected from one of the colleges of New-York, and Dr. Hooker, chairman of the committee on Medical Education, of the American Medical Association, will sufficiently explain itself.

New-York, June 3, 1851.

DR. HOOKER:

Dear Sir,—In the New-York Medical Gazette of June 1st, it is stated that in your report before the American Medical Association held in Charleston, you "singled out the instance of a college in New York, whose delegate had a seat in the Association, and which had recently conferred a degree upon one of the most notorious and unprincipled Quacks in the whole country, and that, too, with a full knowledge of his past history and infamous character." A similar statement also appeared in the New-York Register of the same date.

If I am correctly informed, there were but two of the Medical Colleges of New-York represented in the Association.

As a delegate elected from one of these colleges, I would respectfully inquire of you *which* college was thus denounced, and *who* was the individual thus characterized?

I would respectfully submit, that justice demands an explicit answer, inasmuch as the charge bears an official character.

I remain, in haste, respectfully yours, B. FORDYCE BARKER.

Norwich, June 5, 1851.

DR. BARKER;

Dear Sir, Your note of the 3d instant was duly received, and I hasten to reply to it.

The statement to which you refer was *not* made in the report which I presented to the Association in Charleston. The committee indulged in *no such* personality as is *attributed* to them by the

Gazette and Register. When you come to see the report in print, you will find that rumor, as is too often the case, has committed a very *material misrepresentation.*

Yours respectfully, W. Hooker.

[It will be recollected that we expressed a doubt whether the report of "A Delegate," in our last, was accurately stated; but knowing the source whence we received it, we had no reason to imagine any "misrepresentation." Dr. Hooker and he must settle the matter.]—*N. Y. Med. Gaz.*

SIXTH MEETING OF THE ASSOCIATION OF MEDICAL SUPERINTENDENTS OF AMERICAN INSTITUTIONS FOR THE INSANE.

The following are the propositions referred to in our report of the proceedings of this body in the June No. which were postponed for want of room.

Dr. Kirkbride, from the standing committee on the construction of Hospitals for the Insane, in compliance with the resolution adopted last year, read a report, containing a "series of Resolutions or Propositions, affirming the well ascertained opinions of this body in reference to the fundamental principles which should regulate the erection and internal arrangements of American Hospitals for the Insane."

I. Every Hospital for the Insane should be in the country, not within less than two miles of a large town, and easily accessible at all seasons.

II. No Hospital for the Insane, however limited its capacity, should have less than fifty acres of land, devoted to gardens and pleasure grounds for its patients. At least one hundred acres should be possessed by every State Hospital, or other Institution for 200 patients, to which number these propositions apply, unless otherwise mentioned.

III. Means should be provided to raise ten thousand gallons of water, daily, to reservoirs that will supply the highest parts of the building.

IV. No Hospital for the Insane should be built, without the plan having been first submitted to some Physician or Physicians, who have had charge of a similar establishment, or are practically acquainted with all the details of their arrangements, and received his or their full approbation.

V. The highest number that can with propriety be treated in one building is two hundred and fifty, while two hundred is a preferable maximum.

VI. All such buildings should be constructed of stone or brick, have slate or metallic roofs, and as far as possible be made secure from accidents by fire.

VII. Every Hospital, having provision for two hundred or more patients, should have in it at least eight distinct wards for each sex,—making sixteen classes in the entire establishment.

VIII. Each ward should have in it a parlour, a corridor, single lodgings for patients, an associate dormitory, communicating with a chamber for two attendants; a clothes room, a bath room, a water closet, a dining room, a dumb waiter, and a speaking tube leading to the kitchen or other central part of the building.

IX. No apartments should ever be provided for the confinement of patients, or as their lodging rooms, that are not entirely above ground.

X. No class of rooms should ever be constructed, without some kind of window in each, communicating directly with the external atmosphere.

XI. No chamber for the use of a single patient should ever be less than eight by ten feet, nor should the ceiling of any story occupied by patients be less than twelve in height.

XII. The floors of patients' apartments should always be of wood.

XII. The stairways should always be of iron, stone, or other indestructible material, ample in size and number, and easy of ascent, to afford convenient egress in case of accident from fire.

XIV. A large Hospital should consist of a main central building with wings.

XV. The main central building should contain the offices, receiving rooms for company, and apartments entirely private, for the Superintending Physician and his family, in case that officer resides in the Hospital building.

XVI. The wings should be so arranged, that if rooms are placed on both sides of a corridor, the corridors should be furnished at both ends with moveable glazed sashes for the free admission of both light and air.

XVII. The lighting should be by gas, on account of its convenience, cleanliness, safety, and economy,

XVIII. The apartments for washing clothing, &c., should be detached from the Hospital building.

XIX. The drainage should be under ground, and all the inlets to the sewers should be properly secured to prevent offensive emanations.

XX. All Hospitals should be warmed by passing an abundance of pure fresh air from the external atmosphere, over pipes or plates, containing steam under low pressure, or hot water, the temperature of which at the boiler does not exceed 212 degrees F., and placed in the basement or cellar of the building to be heated.

XXI. A complete system of forced ventilation, in connection with the heating is indispensable to give purity to the air of a hospital for the Insane, and no expense that is required to effect this object thoroughly, can be deemed either misplaced or injudicious.

XXII. The boilers for generating steam for warming the building should be in a detached structure, connected with which may be the engine for pumping water, driving the washing apparatus, and other machinery.

XXIII. All water closets should as far as possible be made of indestructible materials—be simple in their arrangement, and have a strong downward ventilation connected with them.

XXIV. The floors of bath rooms, water closets, and basement stories should as far as possible be made of materials that will not absorb moisture.

XXV. The wards for the most excited class should be constructed with rooms on but one side of a corridor, not less than ten feet wide, the external windows of which should be large, and having pleasant views from them.

XXVI. Wherever practicable, the pleasure grounds of a Hospital for the insane should be surrounded by a substantial wall so placed as not to be unpleasantly visible from the building.

Which propositions having been duly read and maturely considered, were adopted by the Association.

On motion of Dr. Hanbury Smith, it was

Resolved, That the Secretary be instructed to cause the propositions now adopted, in reference to the construction and arrangements of Hospitals for the insane, to be published in the Medical Journals of this Continent, as the Sentiments of this Association, on the subject referred to.

RECORD OF MEDICAL SCIENCE.

PATHOLOGY AND PRACTICE OF MEDICINE.

Case of Small-pox occurring a third time after Vaccination, and proving Fatal. By JOHN WEBSTER, M. D., F. R. S.—Three well-marked examples of the recurrence of small-pox, met with in the same family, were related, one of which terminated fatally. The case especially referred by Dr. Webster was that of H. N. N., who had been vaccinated satisfactorily in 1827, when three months old. Notwithstanding this circumstance, he was attacked by small-pox in 1833, along with an elder brother, who had been likewise vaccinated. Both patients recovered. In 1838 the two lads were again attacked by variola, along with a third brother, likewise regularly vaccinated. All three got quite well in due time. Subsequently, Mr. H. N. N. went to India in the Company's service, where he was seized, in April, 1850, with the usual and well marked symptoms of small-pox, which soon became confluent, and proved fatal at Dharwarinth, on the 13th of that month; this making the third time this gentleman had been attacked by variola, although previously vaccinated.—*Lon. Journ. of Med., May*, 1851.

Cases of Chorea, Treated Successfully with Carbonate of Iron. By T. BROWN, ESQ., Castle Donnington. CASE I.—John Potter, aged 20, living at this place, by trade a painter, was placed under my care March 20th, 1847, a victim of chorea. The symptoms were unusually severe,

and required the employment of energetic measures. Copious depletion, from both the temporal artery aud the median cephalic vein, was resorted to, and on account of threatened violence, a strait jacket was at once applied. So much were the voluntary muscles agitated, that when he attempted locomotion, his body was propelled in all directions, producing the most antic motions. When questioned he can only answer by monosyllables. After the copious depletion referred to, and the administration of some strong drastic cathartics, the violent symptoms greatly abated. During the three following days the violence of the symptoms continued abated, and the convulsive motions were chiefly confined to the upper and lower extremities. At this period, March 27th, I met Dr. Heygate, of Derby, in consultation on the case, and we agreed to administer the following:—R. Hydr. Chlor., gr. v.; Conf. Rosæ Can. q. s., ut fiat pilula alternis noctibus sumenda.—R Dec. Aloes Co., os. iss.; Pot. Tart., dr. j. M. Fiat haust. cras mane sumend. R. Ferri Carb., scr. ij , ter in die sumend.

I may here mention, that I had for several days previous to Dr. Heygate's visit passed electric shocks through our patient without any relief, in fact I really thought the symptoms aggravated by the treatment. From the period that iron was administered, (the dose of which was gradually increased,) there was evident improvement in every respect, and on or about the 20th of Aprii our patient was quite well.

Case II.—Mary Mugliston, aged 9 years, was seized with chorea on or about the 10th of November, 1850, and the symptoms gradually increasing, on the 20th my assistance was required. I found my patient incapable of walking, speech was prevented, and the want of power over the voluntary muscles evidenced a true case of St. Vitus's dance. Judging from the apparent irritation of the pituitary membrane, in conjunction with anorexia, that the bowels gave lodgement to some vermes, I commenced the treatment of the case by giving half-drachm doses of Ol. Terebinth. on sugar, three times a-day, the result of which was the expulsion of a large worm, of the lubricus species. Afterwards drachm doses of carbonate of iron, combined with small quantities of Pulv. Curcumæ, was given three times a-day, and the effects were most satisfactory, and to me very pleasing, the child's power over all the voluntary muscles gradually returned; and a singular feature in the case was, that *the tongue* never failed to indicate the progress of this most satisfactory return to perfect health, which occurred on the 29th of December, 1850.—*Prov. Med. and Sur. Jour., March 5th,* 1851.

Disease of the Pancreas—Diagnosis. By Dr. Fearnside.—After detailing two cases of obscure abdominal disease, in which, after death, the pancreas was the organ chiefly affected, Dr. Fearnside offers the following remarks in diagnosis:—

The earliest phenomena in both cases were the gradual failure of the general health and faulty digestion. To this succeeded *deep-seated pain in the epigastrium*, aggravated a few hours after food; but this he observes may be due to a concomitant irritation of the mucous membrane of the stomach. *Gastrorrhœa* was present in both cases, but as the pancreas

was diseased to such an extent as to prevent secretion, he justly supposes this symptom to be due to vitiated action of the mucous membrane of the stomach.

In one case *ptyalism* was a prominent symptom, and has been noticed in other cases of pancreatic disease. The tongue was *pale and clean* in both cases; the appetite variable.

In one case, *abdominal pulsation* was present. This is a symptom much insisted upon by professor Siebold, when cöexisting with other signs. The urine did not assist the diagnosis. *Emaciation and anæmia* were marked symptoms. From a comparison of these symptoms the author concludes, that though none are in themselves pathognomonic, the reunion of several affords strong probability of pancreatic disease.—*Medical Gazette, December 6th*, 1850.

ANATOMY AND PHYSIOLOGY.

Casein in the Blood; Synthetical Proof by Formation of Artificial Milk.—Dr. Panum, of Copenhagen, of whose interesting accounts of the discovery of Casein in the Blood, we gave a translation in the July number of this Journal for 1850, has published two additional articles on the subject in the *Bibliothek for Læger* for April and July 1850.

In his article in the April number, after recapitulating the facts brought forward in his previous paper, and pointing out the difficulty of establishing a chemical or a physiological distinction between casein and coagulated albumen, the author observes:

"If we institute a comparison between the substance precipitated from blood-serum by means of water and diluted acetic acid, and albumen separated in the same manner from its combination with soda, *we find* truly greater differences than can be distinguished between casein and coagulated albumen.....

"Before the publication of my former contribution, I had already performed various experiments with the view of instituting a more accurate comparison between the material under consideration and albumen separated from its combination with soda. To procure albuminate of soda, I separated the albumen from the serum, then added soda, and applied slight warmth. A greater or less quantity of albumen (according to the quantity of soda employed) entered into combination with the alkali as albuminate of soda, and was precipitated by acetic acid. A difference was here observed between the albumen of serum and that of an egg. For while albumen from an egg required no warming to promote its entering into combination with soda, or its precipitation by means of acetic acid, the albumen of serum had to be slightly warmed before it would unite with an alkali, or give a precipitate with acetic acid.

"The albumen which was precipitated from albuminate of soda, as above described, was always *soluble with difficulty, even in a considerable excess of acetic acid;* eight or ten parts of acetic acid to one of albumen produced no solution. On the other hand, the material *ori*,

ginally present in the serum, and precipitated from it by acetic acid, was soluble in so slight an excess of acetic acid, that it is almost a *finer test of the acid, alkaline, or neutral properties of the liquid, than litmus paper.* This difference seems important; and can scarcely be without essential influence on the organic economy.

"The precipitate thrown down by acetic acid from albuminate of soda, appears as *firm flocks*, which are not changed by shaking, and which resemble what is seen when a not too highly diluted solution of albumen is boiled. The other matter produces a perfectly homogeneous opacity in the liquid, and only after some time forms something like a solid deposit in the bottom of the vessel, which, however, immediately disappears, and is resolved into a general opacity, when the liquid is slightly moved.

"Moreover, if the albumen precipitated from a somewhat diluted solution by boiling, or from a solution of albuminate of soda by acetic acid, be collected in a filter, it forms, when half dry, *an elastic mass, by no means glutinous.* The other substance, on the contrary, when half dry, forms *a very glutinous mass*, almost like turpentine or bird-lime.

"The albumen, when collected in a filter, has, when dry, a *dirty yellow brown colour.* In my previous contribution, I referred to the circumstance, that the substance I am describing sometimes assumed a *beautiful green colour* when thoroughly dried. At that time, I attributed it more to accidental circumstances than to any essential difference, that the substance became green or yellow-brown on drying, as from the same serum I sometimes procured a green and sometimes a yellow product. I now find, that the substance is always of a beautiful green colour when the serum is perfectly clean and free from red blood corpuscles. But if serum be used, in which there is found a greater or less number of blood-corpuscles, the green colour is effaced by the accompanying redness of the blood, and the product becomes either dirty yellow or dirty brown, according to the number of blood-corpuscles. The green colour is removed neither by alcohol, ether, nor water, and seems to belong essentially to the casein.

"However lightly these differences may be thought of, they are yet not less important than the distinction already referred to, between the so-called soluble casein and albuminate of soda. The preconceived opinion that the material under consideration must be albuminate of soda can thus no longer serve as a proof against its identity with what is called casein, or the essential nitrogenous constituent of milk."

Relative Quantity in the Blood.—Dr. Panum states that he is engaged in a quantitative analysis of the casein in different individuals. He does not yet attempt to draw conclusions; but states that in 1000 parts of dried serum he has found in men, in 3 cases, from 4 to 7 parts; in 8 cases of women, from 5·5 to 12 5 parts. The greatest quantities (9·9—11·4—12·5) were in lying-in women shortly after parturition. In nurses there was an average of from 6·5 to 7·4 parts.

Formation of Artificial Milk.—In the July number of the *Bibliothek for Læger*, Dr. Panum writes as follows:—"It occurred to me that

the question of the identity of the material I have been describing with casein, might be solved by the *synthetical* method, which, though it can seldom be satisfactorily employed in scientific diagnosis, yet in the inability of analytical chemistry with regard to the protein compounds, is not to be despised. If it were possible, by adding the necessary constituents, to form from the substance under consideration some universally known product containing casein, such as milk or cheese, we should have a striking proof of the identity of the substance with casein.

I obtained a quantity of serum from bullock's blood. To this I added acetic acid, in the proportion of six drops of concentrated acid to an ounce of serum, and then a considerable quantity of water. The substance described in my former contributions sank, on standing, to the bottom of the vessel, so that the superabundant clear fluid could be poured off. On again adding water and letting the substance sink to the bottom, it was rendered almost perfectly free from soluble albumen, etc. After it had settled as much as possible, the water was poured off, so as not to waste the substance, which remained suspended in a greater quantity of water than casein is diluted with in milk. It was now my object to find out, whether the solution of this substance produced by salts or an alkali could be brought to coagulate by contact with the mucous membrane of the stomach of kittens or puppies; and whether it were possible to produce a substance which, in taste and other circumstances, should agree with milk. But as it would probably be difficult to make animals use the solution as milk, unless the other constituents of milk, namely butter and sugar, were mixed with it, and as the taste and peculiarities of cheese might be modified by them, I first tried, by adding these substances, to produce a liquid which should have some resemblance to milk. At a temperature of 30 Raumur, I added to the milky liquid phosphate of soda, till all the supposed casein was dissolved. I then added butter and sugar in the proportions in which they are usually contained in milk, and, after the butter was melted, I shook the whole mixture in a flask. The liquid, at first greyish or dirty yellow; became of the colour of egg-flip, and, as it cooled, became more and more like milk. The clearer and the less mixed with red blood-corpuscles the serum was, the clearer was the solution and the whiter the milk-like fluid. If the serum was perfectly free from blood-corpuscles, the emulsion, when diluted with water, had the same bluish colour as milk and water; but if there was a strong blood-red tinge in the serum, the solution in phosphate of soda had a reddish and the emulsion a weak yellowish tint. The product had a taste which bore a most striking resemblance to that of true milk; only it was a little more sweet, and left a feeble, though recognisable, bitter after-taste.

Under the microscope, I observed in the emulsion innumerable small globules, exactly like those in milk. On comparing them with those found in milk, scarcely any difference could be perceived, except that their average size in the artificial milk was somewhat greater than in the natural. The globules in the artificial milk were surrounded by a covering, and not simple drops of oil; this covering often showed a

distinct though very fine folding, especially on the larger globules. The globules (like those of true milk) were not dissolved in ether, until the covering had been removed by treating them with nitric acid. But by the side of these small globules there were some which were somewhat greater, and presented in their interior appearances which, if they had been furnished from the organised body, would have been certainly considered as nuclei, granular cell-contents, etc.

As the difficulties, which might have been expected to arise in the microscopic comparison of the artificial and the true milk, had so unexpectedly disappeared, I felt myself called on to inquire whether any more perfect imitation could be attained. The most striking difference, which the artificial milk presented on a superficial examination, was that it required a far shorter time than real milk to form a layer of cream on the surface, and that, after standing some time longer, a layer of clear liquid was formed at the bottom of the vessel. I ascribed this failure to the greater average size of the globules in the emulsion, as compared with true milk-globules. When I employed sugar of milk in place of common sugar, the emulsion was uniform, and shewed no layer of clear liquid at the bottom of the vessel, even when more water was added. At the same time, the average size of the corpuscles became less, so that they could not be distinguished by their size from the true milk-globules, and they were now free from any appearance of nuclei or granular cell-contents. The cream was longer in rising to the surface; and the great sweetness which the emulsion had, when made with common sugar, was no longer prominent, so that the liquid tasted still more like milk. A slight smack of salt disappeared, when the butter was washed in water; and a slightly harsh taste of the butter was still farther removed when unsalted butter was used, which had been freshly churned, and washed with water. There was still a slightly bitter after-taste, but this was removed by using carbonate instead of phosphate of soda; a much smaller quantity of the former salt being required to produce the required solution. It was now impossible for me to recognise, by the taste, any difference between artificial and real milk. As, however, it might be said that "*de gustibus non est disputandum*," I submitted the liquid to the taste of others, with the same result.

It now only remained, to render the agreement perfect between the artificial and true milk, that the former should coagulate when brought into contact with the mucous membrane of the stomach. When I used common sugar, it was not wonderful that my attempts thus to make the liquid coagulate, failed; for it is well known, that the addition of sugar to milk retards or prevents its coagulation. But, even after I had used sugar of milk, I could not perfectly succeed in making the milk coagulate. Instead of fresh calf's stomach, I used the artificially prepared swine's stomach, which is commonly used in the dairies, with or without a temperature of 40 R.; and I also gave the liquid to two kittens, who drank it greedily, and whom I then killed. Under these circumstances, as well as by mere standing, the artificial milk turned,

and separated into a clear liquid, and a thick curdy mass, which had very strongly the well known smell of sour milk; but I could not produce a consistent coagulum, which could be collected in linen, and pressed out. But when the original substance separated from the serum, after being washed from soluble albumen, was warmed, it formed masses resembling pressed curds, and could be collected on a cloth, while the liquid ran through quite clear.

The identity of artificial with natural milk, and of the substance found in the blood with casein, may seem to be not proved; yet the resemblance is so great as to strengthen the probability of their being identical. I have in vain endeavoured to produce from albumen, precipitated from albuminate of soda by acetic acid, and dissolved in phosphate or carbonate of soda, a liquid having the slightest resemblance in taste to milk.—*London Journal of Medicine.*

Anatomy of the Urethra.—Mr. Hancock made the following communication:—Assisted by Mr. Hogg, he had examined, microscopically, the structures surrounding the urethra. He found that the urethra itself was not muscular, but closely invested by organic muscular fibres continuous with the muscular coat of the bladder, which consisted of two layers, an internal and an external. The external passes forwards, and extends over the outside of the prostate gland; the internal, on the contrary, accompanies the mucous lining through the prostate, forming an involuntary muscular covering to the urethra in its passage through the gland. The membranous portion of the urethra is next closely invested by these muscular fibres, which cannot be mistaken for any portion of Wilson's, Guthrie's, or Santorini's muscles, the latter being voluntary, and presenting the usual striated appearance under the microscope, whilst the former are involuntary and nucleated. Continued forwards, they reach the bulb, where they divide, the one part being continued onwards to the orifice of the urethra, lying between it and the corpus spongiosum, whilst the other passes on the outer surface of the corpus spongiosum, separating it from its fibrous investment, to which the fibres adhere pretty closely. These latter are also continued forward to the orifice of the urethra, and, in their course, invest the spongy portion of the bulb, uretha, and glans penis, entering very largely into the formation of that peculiar structure found at the orifice of the urethra, and which appears to consist almost entirely of involuntary muscle and elastic cellular tissue, forming an additional sphincter muscle to those usually described as met with in various parts of the body. It will thus be seen that the corpus spongiosum urethra lies between two layers of involuntary muscle, the one separating it from the urethra, the other from its fibrous covering; an arrangement, doubtless, exerting considerable influence over the expulsion of the blood from the corpus spongiosum when erection of the organ is no longer required, as well as over the emission of urine and the seminal fluid. After the meeting,

Mr. Hancock exhibited, under the microscope, specimens of the muscular tissue just described.—*Ibid.*

Experiments on the Pancreatic Fluid of the Calf.—By M. J. L. Lassaigne.—Since it has been shown that the pancreatic fluid extracted from the dog, enjoys the remarkable property of making an emulsion with oil, and of causing its transformation into fatty acids, either at ordinary temperatures or at the temperatures of the bodies of mammalia; it has become matter of interest to submit to similar experiments the pancreatic fluid obtained from a large herbivorous animal, with the view of ascertaining if it acts in the same manner.

M. Colin, director of the anatomical department of the school of Alfort, having procured some of it, by the method shown to him by M. Bernard, and which he had successfully put in practice with the dog, a small quantity was sent to M. Lassaigne, which he immediately examined.

The pancreatic fluid of the calf, which has an amber yellow colour, is inodorous, is transparent and limpid, and possesses a tolerably marked saline taste; when tested with reddened litmus paper, it restores the blue tint. Heated, it becomes opalescent and turbid, and deposits some coagulated white flakes, which attach themselves to the sides of the vessel in which the experiment is made.

The small quantity at the author's disposal not permitting of a direct analysis, he thought it right to examine, in concert with M. Colin, the action which it exercises on oils.

For this purpose he divided it into several portions in glass tubes, and added to each portion a drop of pure olive oil. The agitation to which he subjected the tubes, formed no emulsion—the oil separating speedily, and floating on the top.

The prolongation of the experiment did not produce any effect, even after eight hours of contact at a temperature of 60 degrees Fahr., the oil having remained neutral, and the liquid preserving its primitive alkalinity. Subsequently exposing these same tubes in a salt-water bath to 100 degrees Fahr., and keeping up this temperature for fourteen hours, produced no change in the properties of the oil, or in those of the pancreatic juice subjected to the experiment.

This result is opposed to that obtained from the pancreatic juice of the dog,—is it constant in the herbivorous animal, or is it an exceptional occurrence due to an alteration in the pancreatic juice of the animal, caused by the painful operation to which it had been subjected? The author does not admit the latter hypothesis, seeing that the animal survived, and did not appear to suffer in health.—*Lond. Monthly Journal of Med. Sience. Journ. de Pharm.*, March, 1851.

On the Chemistry of Respiration.—Dr. Horn has published the results of his experiments on the chemistry of the respiratory process. (*Neue Medicinisch-Chirurgische Zeitung.*) The paper is recapitulated in the following conclusions:—

1. The longer air is retained in the lungs, the larger the quantity of carbonic acid contained.

2. The products of expiration undergo a regular hourly variation.

3. The expiration of carbonic acid increases after the ingestion of food or drink.

4. Children and growing persons exhale more carbonic acid than old people; men more than women, and persons of the sanguine temperament more than those of the lymphatic habit.

5. The use of alcohol increases the exhalation of carbon.

6. Pain, sedentary occupations, menstruation, inflammation, fevers, are so many causes of the diminution of carbonic acid.

7. The exanthemata cause its increase.

The author offers likewise to demonstrate,—

a. That the act of respiration, tends to the maintainance of animal heat, as well as to the purification of the blood.

b. That the act of respiration is in an opposite ratio to the activity of the renal and hepatic secretions.

c. The oxygen is not the only element of the atmosphere which is taken into the blood, the nitrogen is also absorbed and rejected in variable proportions.

d. Irritability increases in proportion to the amount of oxygen absorbed.—*Prov. Med. and Surg. Jour.*

SURGERY.

Tincture of Iodine in the Treatment of External Poisoning.—Dr. T. Smith, of Cincinnati, has used the tincture of iodine, with much success, in several cases of poisoning, the result of contact with the Rhus Toxicodendron (Poison Oak,) Rhus Radicans (Poison Vine,) Rhus Vernx (Swamp Sumac,) &c. Having been frequently called upon to prescribe for this affection, Dr. Smith was lead to the trial of local remedies, likely to prove more prompt than the ordinary antiphlogistic treatment resorted to on such occasions. Within the last two years, he has used the tincture of iodine as a local application, in some half dozen cases, and with such striking good effects, that he confidently recommends it to the profession.—*Abridged from the Western Lancet, May*, 1851.

Imperforate Anus: Life prolonged to the 102*nd day without Evacuation.*—Emily Plumley was born on the 11th of June 1850; and a day or two after birth it was noticed that she was unable to pass the contents of the intestinal canal as children usually do. The parents, however, took but little notice of the fact, as one of the neighbor's children had had a similar condition of parts, and had lived comfortably for more than a month.

When the child was a month old it was admitted as a patient at the Bristol Royal Infirmary. An examination of the nates disclosed a well-formed anus, into which the point of the little finger could be passed, and through which a probe or director might be made to enter about a

quarter of an inch, when it met with firm resistance. She had never passed any meconium or other contents of the intestine, but she passed water freely, took her natural food as infants ordinarily do, and had not been sick nor apparently in any way uneasy.

Upon consultation it was considered a very favorable case for an explorative puncture, to be followed up by passing a curved trocar in the suitable direction along the curve of the sacrum, for as there was a naturally-formed anus it was more than probable that the greater part of the rectum was also there. To this the mother would not consent, although the certain death of the child, if no operation was performed, was pointed out to her; and she accordingly took it away. One of the students, however, found out where she lived, and kept his eye upon the case. The child died on the 21st of September, having lived one hundred and two days, or more than three months, without ever having had an evacuation of the bowels, and having been scarcely at all sick. It never threw up anything like fæcal matter, but now and then a little of the mother's milk regurgitated, as in the case with most children. In fact, the mother stated that it was scarcely as sick as her other children were at the same age.

Post-mortem examination, Sept. 23.—The limbs were very thin. The abdomen much swollen; the circumference of the body measured twenty inches and a half, and it was twenty-one and a half inches in length. The organs in the chest were quite sound; the liver was of a dark purple color externally, but had a more natural appearance when cut. The stomach and first part of the small intestine were in a natural state; but about the end of the jejunum it began to be dilated, and all the lower part of the ilium was enormously distended, so as to be really longer in calibre than that of an adult; its contents were almost entirely gaseous. The cæcum was situated in the right hypochondrium, immediately below the liver. The large intestine was also much dilated, and at the lower part of the rectum measured at least four inches in diameter. At the sigmoid flexure there was a slight contraction, so that the rectum itself appeared like a large and separate pouch, and this was full of yellow and fluid fæcal matter. The muscular structure of this part of the alimentary canal was much hypertrophied, and large and distinct bands of fibre could be seen surrounding the cul de sac of the rectum. The termination below was a rounded fibrous chord, as thick as a crow quill, leading to the anus; and there was not more than a quarter of an inch between the lower part of the pouch which has been described and the highest point to which a probe could be passed through the natural aperture below. The kidneys were healthy; the bladder was distended with urine; and the ureters were very much enlarged in their canal, from the constant pressure exerted by the rectum upon the organs within the pelvis. There was a short diverticulum projecting from about the middle of the small intestine.

This case appears to me to be of considerable importance; for it shews beyond a doubt that if a child is otherwise healthy we need be in no great hurry as to operative proceedings; and that the milk of the mother is well adapted for the nutriment of the infant that although it lived for

three months and never had any evacuation, the collection of fæcal matter was only sufficient to fill the distended pouch in the rectum, and probably amounted to half a pint. Of course, also, any operation that might be undertaken in such a case would be rendered easier by a larger collection of fluid contents in the intestine.—*Prov. Med. and Sur. Jour., March 5th*, 1851.

An Indolent Ulcer, speedily cured by the Electric Moxa.—Mr. Bransby B. Cooper, in a clinical lecture, reported in the London Medical Times, 24th May, 1851, gives an account of a rapid cure of an obstinate indolent ulcer, of two years standing, by the use of electric moxa. The mode of applying this agent is as follows: "There is no complicated apparatus required; no obstacle, no impediment to its application in the hands of the General Practitioner. All that is necessary is a piece of zinc and silver foil, each about the size of a crown piece, which, connected together with a few inches of copper wire, forms the metallic portion of the battery, which is completed by the intervention of the living tissues.

A blistered surface being made a short distance from the sore, the zinc plate placed on this, and the silver plate on the sore itself, a simple galvanic battery is at once formed, and a circuit of electricity established, passing in a direction from the zinc or generating plate by molecular decomposition through the fluids of the tissue to the silver or conducting plate, and thence reconducted to the zinc whence it originated, by (according to the modern doctrine) a polar arrangement of the constituent molecules of the copper wire, thus completing the circle. The battery is excited by the chloride of sodium contained in the animal fluids,—the chlorine being set free at the zinc plate, combines with this metal, forming chloride of zinc, which, acting as an escharotic, gives rise to the eschar that is produced; whilst the sodium, being liberated at the silver plate, to which it gives up its positive influence, immediately decomposes water, combines with its oxygen, and sets free hydrogen. It is not absolutely requisite to denude the dermis by means of a blister previous to the application of the moxa; for if the cuticle be moistened with a solution of chloride of sodium or common salt, when the zinc plate is to be applied, a galvanic current is established, and chloride of zinc formed, which soon destroys the cuticle, and produces an eschar of the subjacent parts, if its application be persisted in."

OBSTETRICS.

Medical Society of London, Feb. 22d, 1851.

Dr. Tilt read a paper on *Diarrhœa as a hitherto Unnoticed Symptom of Menstruation, and on the use of Purgatives at the different Epochs of Menstruation.*

He premised that Friend and Brierre de Boismont not having given a description of catamenial diarrhœa in their works, he concluded that

it was not generally known to the profession. He then inquired into the nature and frequency of catamenial diarrhœa; whether it occur—

1. At the prodroma of menstruation.
2. During its regular establishment.
3. At its cessation.

1st. As a symptom of the prodroma of menstruation diarrhœa rarely occurs; according to Dr. Tilt's observations, once only in 161 cases.

2d. As a symptom of regularly established menstruation, it occurred in 88 instances of 161 women carefully interrogated as to this point. In these 88 cases it *preceded* the menstrual flow in 45; *accompanied* it in 31; *both preceded and accompanied* it in 10; and in 2 instances habitually *followed* it. In the cases of precursory diarrhœa the bowels were in general costive until the cessation of the catamenia.

3d. As a symptom of menstruation at its cessation diarrhœa was much less frequent than is generally believed, occurring in 1 per cent. only of such cases.

The diarrhœa is generally unattended by pain, but sometimes preceded for two or three days by nausea and slight colics; in one case these symptoms lasted eight days previously to the diarrhœa. When it occurs at the change of life, it generally appears at irregular intervals. It may, however, adopt the irregularity of the catamenia. As a general rule, when diarrhœa has habitually accompanied menstruation, there is, at the change of life, a gradual diminution and ultimate cessation of *both* discharges. As a prodromic symptom diarrhœa scarcely ever occurs. It is found in 8 per cent. of cessation cases, and a very frequent precursory symptom of fully established menstruation. He therefore drew the physiological conclusions, that for the performance of menstruation the ovaries not only determine their secretion from the womb, but often call into concentraneous action most of the organs which, being subservient to nutrition, are supplied by the same ganglionic system, and particularly the intestines, with which they are in such close juxtaposition. He then proceeded to the rules which he thought should be adopted in the administration of purgatives:—

1. During the prodroma.
2. During the regular establishment.
3. At the cessation of menstruation.

1st. *Use of purgatives during the prodroma.*—Dr. Tilt concluded from the rarity of this function being preceded by diarrhœa, that nature does not indicate purgatives at this period, while experience has proved the painful consequences frequently entailed by their being administered as emmenagogues.

2d. *Use of purgatives during fully established menstruation.*—In this stage, Dr. Tilt considers they may be given with advantage in serious organic or uterine lesion contra-indicating their use, the great point being so to give them as not to interfere with the menstrual type. As this cannot be done with impunity in the majority of women, brisk purgatives given a few days before the menstrual epoch often anticipate it by several days, and thus vex nature in one of her most constant laws.

Previously, therefore, to their exhibition, an inquiry should be made as to the number of days the diarrhœa usually precedes the menstruation; or, if the patient has not the symptom, the date of appearance of other menstrual symptoms will be a sure guide as to the fit time for giving purgatives.

Dr. Tilt next indicated the value of purgatives in amenorrhœa and chlorosis. He does not confide in them alone, but they only form the initial part of the treatment. He first gives an ameto-cathartic, and then steel and bitters. If the appetite does not improve, and the bowels remain sluggish, he omits the tonic treatment, and gives another emeto-cathartic.

Dr. Tilt is of opinion that purgatives given just before the menstrual epoch are injudicious, as they might increase the flow nature seeks to diminish, but recommends the frequent use of mild aperients to diminish the plethora of the abdominal viscera. Purgatives should also be given after the *expiration* of menstruation, with the same view.

Dr. Tilt frequently orders five or ten grains of the soap and aloes pill before dinner, and states that he has never seen hæmorrhoidal affections caused by the use of this pill, but often relieved. He also often administers flowers of sulphur alone, or else with an admixture of sesquicarbonate or biborate of soda, in the proportion of ʒj. to ℥j., and sometimes with the addition of 5 to 10 grains of ipecacuanha: of this powder, the dose is ϑj. ad ϑji. ounce a day in milk.

In the discussion that followed, the connection of diarrhœa with menstruation was shown not to be an entirely novel observation. Some of the speakers considered it to be indicative of a morbid condition of the uterus, and others as a revulsive to the uterine secretion. Dr. Tilt's opinions were supported by few of the Fellows who spoke on the question.

It was also argued that the number of observations was too small to enable the author of the paper to discover a natural law, one Fellow (Dr. King,) asserting that statists had agreed that at least ten thousand observations of a vital phenomenon were required before the law regulating such vital phenomenon could be safely deduced.

It was stated that Dr. Butler Lane had published a paper proving, from 200 observations, that *constipation* was the attendant upon menstruation.

Objections were also offered to the exhibition of the aloes, as being productive of hæmorrhoids.

Dr. Tilt, in reply, said that he brought forward the results he had already obtained with the full knowledge of their imperfect form, in the hope of testing their value by the experience of others. He had learned with pleasure that Dr. Butler Lane had deemed the subject worthy of investigation, and he owned that he had derived information from the present discussion; while he regretted that he had not met several objections by stating in his paper the manner in which he had conducted the inquiry. His statements did not refer to *diseased*, but truthfully represented the phenomena of *healthy* menstruation, and could stand the physiological deductions he had drawn from them; for he had long been in

the habit of inquiring from all the female patients who sought his advice, what was the habitual state of the menstrual function during the period of health. Chlorotic patients, whom he invariably found subject to constipations or those laboring from severe uterine disease (in whom as Dr. Bennett had stated, diarrhœa existed, and often assumed a morbid intensity proportioned to that of the disease,) were carefully excluded from the 161 cases. Such facts, as well as the judicious observations of Dr. Murphy and Dr. Hunt, confirmed Dr. Tilt in his views. He regretted the impossibility of reconciling the discrepancies of those who had spoken the properties of aloes, being himself in the constant habit of prescribing the aloes and soap pill at dinner-time as an eccaprotic. He had never seen it produce hæmorrhoidal affections; and he maintained, that those whose opinions were at variance with his own must have given it in a different manner, in larger quantities, and to patients predisposed to such affection.—*London Med. Gaz.*, March 7, 1851.

CHEMISTRY.

Means of Solidifying Foot Prints.—It is often a matter of great importance in medico-legal investigations, to preserve an accurate mould of foot-prints; for this purpose M. Hugoulin (*Annales d' Hygiene*) recommends the following plan:—An iron plate supported by bars, is so placed as to be about three or four *centimetres* above the mark to be solidified, and upon it live coals are to be placed so that heat may radiate to the subjacent soil. When this has become heated to about 100°C., *stearic acid*, reduced to impalpable powder, (by previously dissolving it in its weight of alcohol, and then having added abundance of water, evaporating,) is to be dusted over it through a fine hair seive, so as to form an uniform layer. This, falling as a snowy dust, cannot by its weight injure the impression, and is indeed dissolved and absorbed as soon as it touches the soil. It is continued until the earth has become too cold to dissolve any more. After a sufficient time has been allowed for it to have become completely cold, the earth is mined round at some distance so as to raise the entire mass in a single piece, cutting afterwards carefully away the superfluous soil. After reversing it on several folds of linen, and surrounding it with a case, plaster is allowed to run in between the case and the reverse of the impression, so as to ensure complete solidity to it. If the soil is muddy or marshy, before commencing these operations, a trench should be dug around, into which plaster is to be introduced, which, on solidifying, will absorb much of the moisture, after which the whole mass may be exposed for some days to the sun and air before commencing to act upon it. M. Hugoulin says this plan is applicable to the most shifting soils, as sand &c., and indeed to all except snow.—*Prov. Med. and Surg. Jour.*